

R-MAMMA1002820//ESTs//5.0e-14:192:74//Hs.134635:AA226260  
R-MAMMA1002830//EST//4.0e-50:255:97//Hs.160674:AI248319  
R-MAMMA1002833//EST//1.2e-48:306:88//Hs.149580:AI281881  
R-MAMMA1002835  
R-MAMMA1002838//EST//2.7e-12:161:76//Hs.163252:AA828723  
R-MAMMA1002842//ESTs//1.7e-41:366:78//Hs.141899:N22395  
R-MAMMA1002843//Von Hippel-Lindau syndrome//8.8e-38:258:79//Hs.78160:AF0  
10238  
R-MAMMA1002844//ESTs//3.5e-51:250:99//Hs.151445:AA351081  
R-MAMMA1002858//H.sapiens ERF-1 mRNA 3' end//9.0e-101:361:91//Hs.85155:X  
79067  
R-MAMMA1002868//ESTs//2.1e-38:301:80//Hs.132717:AA171941  
R-MAMMA1002871//EST//6.0e-88:413:99//Hs.149057:AI243592  
R-MAMMA1002880//ESTs//6.5e-100:506:96//Hs.163533:N52194  
R-MAMMA1002881//EST//1.1e-40:335:80//Hs.160895:AI365871  
R-MAMMA1002886//Small inducible cytokine A5 (RANTES)//3.4e-36:228:88//Hs  
.155464:AF088219  
R-MAMMA1002887//ESTs//4.7e-87:409:99//Hs.152155:AA424811  
R-MAMMA1002890//ESTs, Weakly similar to coded for by C. elegans cDNA CEE  
SB82F [C.elegans]//4.2e-92:438:99//Hs.155871:AA533783  
R-MAMMA1002892//Homo sapiens EVI5 homolog mRNA, complete cds//4.9e-62:32  
2:80//Hs.26929:AF008915  
R-MAMMA1002895//ESTs//2.7e-32:330:76//Hs.139132:AA211087  
R-MAMMA1002908//Calcium modulating ligand//4.6e-48:313:86//Hs.13572:AF06  
8179  
R-MAMMA1002909//Human mRNA for KIAA0180 gene, partial cds//3.4e-09:132:7  
6//Hs.90981:D80002  
R-MAMMA1002930//EST//4.9e-44:260:91//Hs.149580:AI281881  
R-MAMMA1002938

R-MAMMA1002941//Human Line-1 repeat mRNA with 2 open reading frames//1.1e-83:556:85//Hs.23094:M19503

R-MAMMA1002947//ESTs//7.0e-22:222:80//Hs.103395:T79243

R-MAMMA1002964//Human mRNA for KIAA0355 gene, complete cds//1.6e-44:427:77//Hs.153014:AB002353

R-MAMMA1002970//Thromboxane A2 receptor//7.9e-48:300:84//Hs.89887:D38081

R-MAMMA1002972//ESTs, Weakly similar to KIAA0371 [H.sapiens]//9.6e-104:525:95//Hs.94396:AA399630

R-MAMMA1002973//ESTs//4.4e-40:257:87//Hs.163580:H15835

R-MAMMA1002982//ESTs//2.5e-28:115:87//Hs.141694:W15279

R-MAMMA1002987//Homo sapiens DNA fragmentation factor 40 kDa subunit (DF F40) mRNA, complete cds//2.1e-41:402:67//Hs.133089:AF064019

R-MAMMA1003003//Calcium modulating ligand//1.9e-45:380:79//Hs.13572:AF068179

R-MAMMA1003004//ESTs//3.0e-07:378:60//Hs.61885:AI127857

R-MAMMA1003007//ESTs//2.0e-47:404:80//Hs.146314:R99617

R-MAMMA1003011//ESTs, Highly similar to HISTONE MACRO-H2A.1 [Rattus norvegicus]//1.4e-53:320:90//Hs.92023:AI022248

R-MAMMA1003015//ESTs//1.5e-42:363:79//Hs.155184:AA573189

R-MAMMA1003019//ESTs//4.8e-10:232:66//Hs.111341:AA251268

R-MAMMA1003026//ESTs//2.3e-83:394:99//Hs.24668:AA897315

R-MAMMA1003031//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING ENTRY !!!! [H.sapiens]//3.5e-27:257:77//Hs.96337:AA225358

R-MAMMA1003035//ESTs//1.3e-94:481:94//Hs.92411:AA603321

R-MAMMA1003039//EST//0.56:210:61//Hs.162248:AA552160

R-MAMMA1003040//ESTs//2.1e-17:261:70//Hs.46980:W55940

R-MAMMA1003044//EST//2.4e-18:124:91//Hs.130321:AI002941

R-MAMMA1003047//ESTs//1.0e-20:209:78//Hs.15916:H12862

R-MAMMA1003049//14-3-3 PROTEIN SIGMA//0.94:184:60//Hs.2510:X57348

R-MAMMA1003055//EST//1.0e-49:281:92//Hs.149580:AI281881  
R-MAMMA1003056//ESTs//0.99:107:66//Hs.30348:AI038559  
R-MAMMA1003057//ESTs, Highly similar to hypothetical protein MD6 [M.musculus] //1.1e-102:545:93//Hs.13755:AA878911  
R-MAMMA1003066//H.sapiens mRNA for urea transporter//8.1e-45:322:83//Hs.66710:X96969  
R-MAMMA1003089//ESTs, Weakly similar to !!!! ALU SUBFAMILY SQ WARNING ENTRY !!!! [H.sapiens] //1.4e-34:421:70//Hs.161959:AA493652  
R-MAMMA1003099//ESTs//1.1e-43:379:79//Hs.37573:H59651  
R-MAMMA1003104//ESTs//2.1e-97:498:96//Hs.9299:T51283  
R-MAMMA1003113//EST//3.7e-29:457:70//Hs.123616:AA815366  
R-MAMMA1003127//ESTs//2.6e-41:283:86//Hs.146811:AA410788  
R-MAMMA1003135//ESTs//7.2e-101:504:97//Hs.87729:AA863125  
R-MAMMA1003140//ESTs//4.3e-44:200:89//Hs.152093:AI149537  
R-MAMMA1003146//Wingless-type MMTV integration site 5A, human homolog//0.020:413:61//Hs.152213:L20861  
R-MAMMA1003150  
R-MAMMA1003166//ESTs, Moderately similar to PEANUT PROTEIN [Drosophila melanogaster] //2.0e-87:524:89//Hs.6884:W30736  
R-NT2RM2002580//Homo sapiens clone 24781 mRNA sequence//1.6e-111:587:94//Hs.108112:AF070640  
R-NT2RM4000024//ESTs//2.9e-98:523:94//Hs.26641:R59312  
R-NT2RM4000027  
R-NT2RM4000030//ESTs//1.6e-96:482:96//Hs.90625:T03663  
R-NT2RM4000046//ESTs//1.6e-91:461:97//Hs.151237:AI186169  
R-NT2RM4000061//ESTs//4.3e-31:167:97//Hs.110821:Z78379  
R-NT2RM4000085//Homo sapiens clone 24700 unknown mRNA, partial cds//4.0e-113:549:97//Hs.95665:AF070639  
R-NT2RM4000086//EST//2.7e-17:212:76//Hs.137041:AA877817

R-NT2RM4000104//ESTs//3.0e-85:452:94//Hs.101750:H19708  
 R-NT2RM4000139//EST//3.3e-05:156:66//Hs.133228:AI052312  
 R-NT2RM4000155//ESTs, Moderately similar to THREONYL-TRNA SYNTHETASE, CY  
 TOPLASMIC [H.sapiens]//1.9e-99:536:92//Hs.127810:AI246301  
 R-NT2RM4000156//EST//0.89:169:62//Hs.162967:AA676397  
 R-NT2RM4000167//ESTs//1.0:214:61//Hs.119370:W52962  
 R-NT2RM4000169//ESTs//5.4e-82:440:93//Hs.159379:AI382160  
 R-NT2RM4000191//ESTs, Weakly similar to P68 PROTEIN [H.sapiens]//4.1e-99  
 :542:93//Hs.6366:AA614113  
 R-NT2RM4000197//ESTs//5.4e-113:567:96//Hs.22975:AA156723  
 R-NT2RM4000199//ESTs//0.020:95:65//Hs.146203:AI254528  
 R-NT2RM4000200//ESTs//1.4e-100:488:97//Hs.126538:AA931876  
 R-NT2RM4000202//Small inducible cytokine A5 (RANTES)//4.3e-37:330:77//Hs  
 .155464:AF088219  
 R-NT2RM4000210//Homo sapiens mRNA for KIAA0712 protein, complete cds//1.  
 7e-103:546:94//Hs.111138:AB018255  
 R-NT2RM4000215  
 R-NT2RM4000229//ESTs//7.1e-92:457:97//Hs.162074:AA477760  
 R-NT2RM4000233//Fms-related tyrosine kinase 1 (vascular endothelial grow  
 th factor/vascular permeability factor receptor)//0.00020:174:66//Hs.235  
 :X51602  
 R-NT2RM4000244//ESTs//6.6e-61:320:95//Hs.108646:AA613031  
 R-NT2RM4000251//Homo sapiens mRNA for TRIP6 (thyroid receptor interactin  
 g protein)//0.63:219:62//Hs.119498:AF000974  
 R-NT2RM4000265//ESTs//8.8e-105:489:99//Hs.131001:AI378742  
 R-NT2RM4000290//ESTs//4.0e-87:435:96//Hs.162592:AA594128  
 R-NT2RM4000324//ESTs//2.2e-80:413:96//Hs.12313:R43673  
 R-NT2RM4000327//Small inducible cytokine A5 (RANTES)//3.2e-45:286:87//Hs  
 .155464:AF088219



R-NT2RM4000344//Clathrin, light polypeptide (Lcb)//8.6e-60:452:84//Hs.73  
919:X81637

R-NT2RM4000349//ESTs, Weakly similar to KIAA0005 [H.sapiens]//2.5e-117:5  
79:96//Hs.5216:AA534881

R-NT2RM4000354//ESTs//2.1e-85:406:99//Hs.126774:AI224479

R-NT2RM4000356//ESTs//7.9e-109:548:96//Hs.44278:AA418063

R-NT2RM4000366//Homo sapiens mRNA for KIAA0642 protein, partial cds//2.8  
e-113:577:95//Hs.8152:AB014542

R-NT2RM4000368//ESTs//2.2e-61:310:97//Hs.143611:M78140

R-NT2RM4000386//ESTs, Weakly similar to tenascin-like protein [D.melanog  
aster]//1.0e-93:521:92//Hs.41793:AA775879

R-NT2RM4000395//ESTs, Highly similar to HYPOTHETICAL 52.9 KD PROTEIN IN  
SAP155-YMR31 INTERGENIC REGION [Saccharomyces cerevisiae]//1.9e-99:524:  
94//Hs.5249:U55977

R-NT2RM4000414//EST//2.7e-06:196:64//Hs.136648:AA688285

R-NT2RM4000421//ESTs, Weakly similar to No definition line found [C.eleg  
ans]//5.4e-75:470:90//Hs.69235:AA192359

R-NT2RM4000425//H.sapiens mRNA for MACH-alpha-2 protein//0.17:112:69//Hs  
.19949:X98173

R-NT2RM4000433//ESTs//2.7e-100:479:98//Hs.24553:AI150687

R-NT2RM4000457//ESTs//5.1e-107:535:95//Hs.7579:AA775865

R-NT2RM4000471//ESTs, Highly similar to NIFS-LIKE 54.5 KD PROTEIN [Sacc  
haromyces cerevisiae]//6.0e-99:492:96//Hs.21090:AA418587

R-NT2RM4000486//ESTs, Moderately similar to unnamed protein product [H.s  
apiens]//2.2e-102:493:97//Hs.111279:W84558

R-NT2RM4000496

R-NT2RM4000511//EST//5.1e-43:326:81//Hs.157658:AI358465

R-NT2RM4000514//ESTs//1.7e-112:552:96//Hs.6686:AA205496

R-NT2RM4000515//ESTs, Weakly similar to HYPOTHETICAL 85.0 KD PROTEIN IN

CPA2-ATP2 INTERGENIC REGION [Saccharomyces cerevisiae] //1.4e-60:343:93//  
Hs.16014:AA074879  
R-NT2RM4000520//ESTs//2.7e-55:266:100//Hs.99838:AA204731  
R-NT2RM4000531//ESTs//2.0e-88:502:91//Hs.13110:T67461  
R-NT2RM4000532//ESTs//0.47:290:58//Hs.148753:T91777  
R-NT2RM4000534//EST//0.00025:303:60//Hs.162809:AA632198  
R-NT2RM4000585//EST//0.28:63:77//Hs.150024:AI291981  
R-NT2RM4000590//ESTs//5.8e-65:320:98//Hs.116017:AA613437  
R-NT2RM4000595//Homo sapiens KIAA0431 mRNA, partial cds//0.99:189:64//Hs  
.16349:AB007891  
R-NT2RM4000603//ESTs//4.6e-68:356:96//Hs.48855:AA134589  
R-NT2RM4000611//ESTs//1.5e-89:431:97//Hs.26117:W16697  
R-NT2RM4000616//ESTs, Highly similar to ACETYL-COENZYME A SYNTHETASE [E  
scherichia coli] //1.4e-102:519:96//Hs.14779:N64822  
R-NT2RM4000674//ESTs//5.1e-78:398:97//Hs.8268:N70144  
R-NT2RM4000689//ESTs, Weakly similar to T01G9.4 [C.elegans] //2.9e-115:55  
0:98//Hs.11820:AA205531  
R-NT2RM4000698//ESTs//2.0e-17:130:87//Hs.86420:AA927510  
R-NT2RM4000700  
R-NT2RM4000712//EST//0.99:103:65//Hs.114039:AA701128  
R-NT2RM4000717//ESTs, Highly similar to BONE MORPHOGENETIC PROTEIN 1 PR  
ECURSOR [Mus musculus] //2.2e-103:519:95//Hs.6823:W18181  
R-NT2RM4000733//ESTs//8.7e-88:429:98//Hs.72185:AA465311  
R-NT2RM4000734//Homo sapiens mRNA for KIAA0760 protein, partial cds//3.6  
e-105:536:95//Hs.137168:AB018303  
R-NT2RM4000741//ESTs//0.99:266:58//Hs.142718:AA034046  
R-NT2RM4000751//ESTs//1.6e-20:351:66//Hs.43145:AA776988  
R-NT2RM4000764  
R-NT2RM4000778//EST//0.066:254:61//Hs.148232:AA904174

R-NT2RM4000779//Homo sapiens mRNA for KIAA0451 protein, complete cds//9.3e-106:546:94//Hs.18586:AB007920

R-NT2RM4000787//Human melanoma antigen recognized by T-cells (MART-1) mRNA//6.5e-40:424:73//Hs.154069:U06452

R-NT2RM4000790//EST//9.0e-48:259:94//Hs.159694:AI417008

R-NT2RM4000795//Human mRNA for KIAA0067 gene, complete cds//1.0:203:63//Hs.20991:D31891

R-NT2RM4000796//ESTs//7.0e-106:506:98//Hs.43559:AI003520

R-NT2RM4000798//Human polymorphic epithelial mucin core protein mRNA, 3' end//2.5e-28:158:96//Hs.118249:M21868

R-NT2RM4000813

R-NT2RM4000820//ESTs, Weakly similar to hypothetical protein [H.sapiens] //1.3e-109:539:97//Hs.99636:AI219667

R-NT2RM4000833//ESTs, Moderately similar to ZK863.3 [C.elegans] //4.0e-112:448:99//Hs.20223:AA482031

R-NT2RM4000848//ESTs//8.1e-97:476:97//Hs.16036:AA883864

R-NT2RM4000852//ESTs//6.4e-94:467:97//Hs.11556:AI309597

R-NT2RM4000855//ESTs//2.9e-95:544:90//Hs.106525:AI283343

R-NT2RM4000887

R-NT2RM4000895//ESTs, Moderately similar to !!!! ALU SUBFAMILY SQ WARNIN G ENTRY !!!! [H.sapiens] //9.3e-96:450:99//Hs.142076:AA604514

R-NT2RM4000950//ESTs//2.6e-91:438:98//Hs.43827:AA455262

R-NT2RM4000971//EST//2.9e-96:461:99//Hs.139709:AA227887

R-NT2RM4000979//EST//1.6e-67:329:98//Hs.96927:AA349647

R-NT2RM4000996//ESTs, Weakly similar to ZINC FINGER PROTEIN 91 [H.sapiens] //1.7e-82:414:96//Hs.115342:AA650126

R-NT2RM4001002//Homo sapiens mRNA for KIAA0729 protein, partial cds//3.8e-114:545:97//Hs.19542:AB018272

R-NT2RM4001016//Homo sapiens mRNA for KIAA0639 protein, partial cds//2.5

e-114:556:97//Hs.15711:AB014539  
R-NT2RM4001032//ESTs//7.8e-17:132:84//Hs.138720:N53352  
R-NT2RM4001047//Homo sapiens UKLF mRNA for ubiquitous Kruppel like facto  
r, complete cds//0.42:133:67//Hs.32170:AB015132  
R-NT2RM4001054//ESTs//1.7e-84:404:99//Hs.116407:AA815300  
R-NT2RM4001084//ESTs//3.4e-91:439:99//Hs.103177:W72798  
R-NT2RM4001092//ESTs//1.4e-86:517:89//Hs.132969:Z78324  
R-NT2RM4001116//EST//5.2e-57:275:100//Hs.131115:AI016962  
R-NT2RM4001140//ESTs//5.5e-96:461:98//Hs.86965:AA252276  
R-NT2RM4001151//ESTs//0.40:263:58//Hs.113189:R08311  
R-NT2RM4001155//ESTs//8.3e-105:544:94//Hs.29647:W60848  
R-NT2RM4001160//EST//7.6e-25:380:68//Hs.147405:AI209085  
R-NT2RM4001187//ESTs, Moderately similar to !!!! ALU SUBFAMILY SC WARNIN  
G ENTRY !!!! [H.sapiens]//9.2e-43:273:91//Hs.109005:N31174  
R-NT2RM4001191//Cytochrome P450, 51 (lanosterol 14-alpha-demethylase)//3  
.1e-32:274:70//Hs.2379:U23942  
R-NT2RM4001200//ESTs//4.5e-102:494:97//Hs.31844:N32849  
R-NT2RM4001203  
R-NT2RM4001204//ESTs//9.8e-88:468:93//Hs.4990:T65307  
R-NT2RM4001217//ESTs//1.2e-75:396:94//Hs.25042:R72410  
R-NT2RM4001256//ESTs//1.0:157:62//Hs.65377:AA994677  
R-NT2RM4001258//ESTs//9.6e-41:260:88//Hs.27633:N76184  
R-NT2RM4001309  
R-NT2RM4001313//EST//0.0022:150:66//Hs.161573:W84857  
R-NT2RM4001316//ESTs//3.5e-26:139:99//Hs.23100:AI128899  
R-NT2RM4001320//ESTs//1.6e-97:308:99//Hs.112024:AI042352  
R-NT2RM4001340//ESTs, Highly similar to UTR4 PROTEIN [Saccharomyces cer  
evisiae]//1.9e-105:522:97//Hs.18442:AI129307  
R-NT2RM4001344//EST//1.1e-90:436:99//Hs.95900:AA160339

R-NT2RM4001347//EST//0.17:186:61//Hs.16751:T90476  
R-NT2RM4001371//EST//0.0069:270:62//Hs.99239:AA450211  
R-NT2RM4001382  
R-NT2RM4001384//ESTs//9.6e-91:445:98//Hs.55000:AA805507  
R-NT2RM4001410//EST//0.13:50:82//Hs.157675:AI358790  
R-NT2RM4001411//ESTs, Weakly similar to lymphocyte specific adaptor protein Lnk [M.musculus] //4.0e-102:539:94//Hs.15744:AI055859  
R-NT2RM4001412  
R-NT2RM4001414//ESTs//6.5e-35:226:88//Hs.121727:AA775895  
R-NT2RM4001437//EST//0.017:169:67//Hs.13207:F10054  
R-NT2RM4001444//ESTs, Weakly similar to ISOLEUCYL-TRNA SYNTHETASE, MITOCHONDRIAL [S.cerevisiae] //7.4e-108:544:94//Hs.7558:AA526812  
R-NT2RM4001454//ESTs//4.7e-108:517:98//Hs.32295:N32277  
R-NT2RM4001455//EST//9.6e-81:395:97//Hs.127978:AA969739  
R-NT2RM4001483//Human mRNA for KIAA0033 gene, partial cds//1.8e-58:324:85//Hs.22271:D26067  
R-NT2RM4001489//Homo sapiens mRNA for KIAA0685 protein, complete cds//7.0e-104:547:93//Hs.153121:AB014585  
R-NT2RM4001519//Histatin 1//0.53:340:59//Hs.119101:M26664  
R-NT2RM4001522//Small inducible cytokine A5 (RANTES)//8.4e-55:306:80//Hs.155464:AF088219  
R-NT2RM4001557//ESTs, Weakly similar to F11A10.4 [C.elegans] //6.1e-21:165:83//Hs.29134:H43072  
R-NT2RM4001565//ESTs//2.0e-103:483:99//Hs.121273:AA758027  
R-NT2RM4001566//Human DNA sequence from clone 1409 on chromosome Xp11.1-11.4. Contains a Inter-Alpha-Trypsin Inhibitor Heavy Chain LIKE gene, a alternatively spliced Melanoma-Associated Antigen MAGE LIKE gene and a 6-Phosphofructo-2-kinase (Fructose-2,6-bisphosphatase) LIKE pseudogene. Contains ESTs, STSS and genomic marker DXS8032//2.7e-43:446:72//Hs.4943:Z

98046

R-NT2RM4001569//ESTs//3.6e-37:186:100//Hs.86959:AA888009

R-NT2RM4001582//ESTs//1.2e-96:459:98//Hs.114432:N52946

R-NT2RM4001592

R-NT2RM4001594//ESTs//1.6e-83:404:98//Hs.134740:AA282171

R-NT2RM4001597//ESTs//6.9e-111:558:96//Hs.11408:AI358871

R-NT2RM4001605//Homo sapiens mRNA for KIAA0791 protein, complete cds//2.

1e-112:565:95//Hs.23255:AB018334

R-NT2RM4001611//EST//5.9e-74:353:99//Hs.125318:AA837079

R-NT2RM4001629//ESTs//6.1e-95:453:99//Hs.115765:AA485957

R-NT2RM4001650

R-NT2RM4001662

R-NT2RM4001666//Homo sapiens mRNA for KIAA0469 protein, complete cds//3.

6e-36:230:70//Hs.7764:AB007938

R-NT2RM4001682//EST//4.3e-68:393:90//Hs.157362:AI367496

R-NT2RM4001710//ESTs//4.3e-48:235:99//Hs.7299:AA203440

R-NT2RM4001714//ESTs//0.0014:568:58//Hs.50458:AA868686

R-NT2RM4001715//ESTs//6.5e-104:487:99//Hs.153581:AA630465

R-NT2RM4001731//ESTs, Weakly similar to No definition line found [C.elegans] //3.1e-108:563:94//Hs.18510:AA522887

R-NT2RM4001741//T3 receptor-associating cofactor-1 [human, fetal liver, mRNA, 2930 nt] //0.083:124:68//Hs.120980:S83390

R-NT2RM4001746//ESTs//6.1e-90:420:100//Hs.139003:AA948200

R-NT2RM4001754//Human kpni repeat mrna (cdna clone pcd-kpni-4), 3' end//5.4e-59:504:78//Hs.139107:K00629

R-NT2RM4001758//ESTs//8.9e-27:140:100//Hs.149973:AI290740

R-NT2RM4001776//Homo sapiens mRNA for KIAA0727 protein, partial cds//6.4e-24:236:80//Hs.39871:AB018270

R-NT2RM4001783//ESTs//9.9e-30:156:99//Hs.115260:AA314956

R-NT2RM4001810//ESTs//1.3e-65:346:95//Hs.131915:W22567  
 R-NT2RM4001813//ESTs//5.7e-102:473:100//Hs.87574:AI089920  
 R-NT2RM4001823//ESTs//3.8e-62:324:95//Hs.124109:AA888839  
 R-NT2RM4001828//ESTs//1.3e-119:563:98//Hs.102397:AA706551  
 R-NT2RM4001836//ESTs//5.5e-16:92:100//Hs.26996:AA551070  
 R-NT2RM4001841//ESTs//1.3e-99:540:94//Hs.42322:AA082619  
 R-NT2RM4001842//ESTs, Weakly similar to !!!! ALU SUBFAMILY SQ WARNING EN  
 TRY !!!! [H.sapiens] //4.1e-10:274:62//Hs.161959:AA493652  
 R-NT2RM4001856//ESTs, Weakly similar to contains similarity to ATP/GTP-b  
 inding site motif [C.elegans] //3.0e-43:292:86//Hs.14202:N46000  
 R-NT2RM4001858//ESTs//6.2e-104:495:98//Hs.118686:AA682280  
 R-NT2RM4001865//Homo sapiens mRNA for atopy related autoantigen CALC//1.  
 6e-120:592:97//Hs.61628:Y17711  
 R-NT2RM4001876//ESTs//2.9e-98:532:92//Hs.100734:AA158252  
 R-NT2RM4001880//ESTs//2.5e-29:224:86//Hs.6193:AA045149  
 R-NT2RM4001905//ESTs//5.6e-109:565:95//Hs.9536:AA114178  
 R-NT2RM4001922//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT  
 RY !!!! [H.sapiens] //1.2e-105:535:95//Hs.30991:AA994438  
 R-NT2RM4001930//ESTs//4.1e-84:425:96//Hs.80042:N63143  
 R-NT2RM4001938//EST//0.00040:241:60//Hs.147235:AI205893  
 R-NT2RM4001940//Homo sapiens timeless homolog mRNA, complete cds//2.0e-1  
 10:556:95//Hs.118631:AF098162  
 R-NT2RM4001953//ESTs//5.3e-65:338:96//Hs.33718:AA453268  
 R-NT2RM4001965//ESTs, Weakly similar to T14B4.2 gene product [C.elegans]  
 //5.7e-62:326:95//Hs.3385:N25917  
 R-NT2RM4001969//ESTs, Weakly similar to IP63 protein [R.norvegicus] //1.9  
 e-21:121:98//Hs.8772:AA521097  
 R-NT2RM4001979//ESTs//1.4e-96:465:98//Hs.157103:W60265  
 R-NT2RM4001984

R-NT2RM4001987  
 R-NT2RM4002013//EST//2.2e-14:110:90//Hs.160835:AI345528  
 R-NT2RM4002018  
 R-NT2RM4002034//Human mRNA for KIAA0118 gene, partial cds//9.4e-46:293:87//Hs.154326:D42087  
 R-NT2RM4002044//ESTs//2.8e-107:537:96//Hs.24078:W44435  
 R-NT2RM4002054//ESTs//3.7e-88:482:94//Hs.4243:T78226  
 R-NT2RM4002062//ESTs//1.4e-55:377:85//Hs.152592:AA587887  
 R-NT2RM4002063//Calcium modulating ligand//1.8e-43:385:78//Hs.13572:AF068179  
 R-NT2RM4002066//Homo sapiens OPA-containing protein mRNA, complete cds//5.5e-42:554:68//Hs.85313:AF071309  
 R-NT2RM4002067//Human kpni repeat mrna (cdna clone pcd-kpni-4), 3' end//2.3e-43:468:73//Hs.139107:K00629  
 R-NT2RM4002073//ESTs, Weakly similar to very-long-chain acyl-CoA synthetase [H.sapiens]//6.8e-57:290:96//Hs.109274:AA193416  
 R-NT2RM4002075//ESTs//0.078:267:61//Hs.163563:AA641655  
 R-NT2RM4002093//ESTs//1.2e-64:316:99//Hs.34956:AI052528  
 R-NT2RM4002109//ESTs//1.0:95:69//Hs.25897:W65409  
 R-NT2RM4002128//Homo sapiens mRNA for BCL9 gene//0.51:258:60//Hs.122607:Y13620  
 R-NT2RM4002140//ESTs//5.5e-46:187:94//Hs.8737:W22712  
 R-NT2RM4002145//ESTs//4.6e-70:374:94//Hs.141082:H18987  
 R-NT2RM4002146//ESTs//1.9e-93:439:99//Hs.119295:AA442090  
 R-NT2RM4002161//Homo sapiens laforin (EPM2A) mRNA, partial cds//1.5e-111:560:96//Hs.22464:AF084535  
 R-NT2RM4002174//Homo sapiens LIM protein mRNA, complete cds//3.2e-46:552:72//Hs.154103:AF061258  
 R-NT2RM4002189//ESTs//9.6e-75:352:100//Hs.98350:H15400



R-NT2RM4002194//EST//0.22:68:72//Hs.149104:AI244343  
R-NT2RM4002205//EST//0.00028:103:72//Hs.130032:AA897678  
R-NT2RM4002213//ESTs//3.3e-15:160:78//Hs.63304:W22079  
R-NT2RM4002226//ESTs, Highly similar to GTPASE ACTIVATING PROTEIN ROTUN  
D [*Drosophila melanogaster*]//5.1e-112:569:95//Hs.23900:U82984  
R-NT2RM4002251//ESTs, Weakly similar to similar to alpha-1,3-mannosyl-gl  
ycoprotein beta-1, 2-N-acetylglucosaminyltransferase [*C.elegans*]//1.1e-1  
00:544:93//Hs.27567:W72190  
R-NT2RM4002256//Small inducible cytokine A5 (RANTES)//1.0e-44:341:81//Hs  
.155464:AF088219  
R-NT2RM4002266//ESTs//2.6e-100:539:93//Hs.57976:AA535864  
R-NT2RM4002278//ESTs//1.8e-112:569:95//Hs.87281:AA128263  
R-NT2RM4002281//ESTs//4.9e-20:187:80//Hs.141203:H52638  
R-NT2RM4002287//ESTs//7.9e-84:388:94//Hs.33977:N52461  
R-NT2RM4002294  
R-NT2RM4002301//ESTs//4.5e-111:556:96//Hs.85916:AA194164  
R-NT2RM4002323//ESTs//4.5e-102:498:97//Hs.85782:AA191498  
R-NT2RM4002339//ESTs//5.0e-59:283:100//Hs.125048:AA682913  
R-NT2RM4002344//V-akt murine thymoma viral oncogene homolog 2//0.29:153:  
66//Hs.155129:M77198  
R-NT2RM4002373//Homo sapiens mRNA for KIAA0649 protein, complete cds//2.  
8e-122:593:97//Hs.26163:AB014549  
R-NT2RM4002374//ESTs//3.3e-40:505:70//Hs.95115:AA206594  
R-NT2RM4002383//ESTs//2.7e-93:455:97//Hs.134278:AA648884  
R-NT2RM4002390//ESTs//3.3e-93:481:95//Hs.48764:AA613328  
R-NT2RM4002409//ESTs, Weakly similar to coded for by *C. elegans* cDNA yk5  
2e10.5 [*C.elegans*]//1.3e-97:473:98//Hs.16464:W19606  
R-NT2RM4002438//ESTs//0.74:162:61//Hs.65377:AA994677  
R-NT2RM4002446

R-NT2RM4002452//EST//1.0:164:60//Hs.116619:AA668142  
R-NT2RM4002457  
R-NT2RM4002460//ESTs//3.0e-74:385:96//Hs.6933:R07890  
R-NT2RM4002479//Homo sapiens RNA helicase-related protein mRNA, complete  
cds//1.6e-103:507:97//Hs.8765:AF083255  
R-NT2RM4002482//Homo sapiens mRNA for KIAA0691 protein, complete cds//2.  
3e-32:172:98//Hs.94781:AB014591  
R-NT2RM4002493//ESTs//6.4e-73:366:97//Hs.157114:T58884  
R-NT2RM4002499//ESTs//3.5e-61:307:97//Hs.117737:AI088029  
R-NT2RM4002504//ESTs//2.1e-55:306:94//Hs.10949:AA464464  
R-NT2RM4002527//ESTs, Weakly similar to peroxisome targeting signal 2 re  
ceptor [H.sapiens]//1.4e-73:360:91//Hs.31030:H50467  
R-NT2RM4002532//ESTs//1.3e-21:191:78//Hs.146811:AA410788  
R-NT2RM4002534//ESTs//1.8e-99:512:95//Hs.13526:AI417057  
R-NT2RM4002567//ESTs//7.6e-41:272:87//Hs.7114:R24312  
R-NT2RM4002571//ESTs, Highly similar to POLYPEPTIDE N-ACETYLGALACTOSAMI  
NYLTRANSFERASE [Bos taurus]//2.3e-89:435:97//Hs.15830:AA165698  
R-NT2RM4002593//ESTs//2.3e-109:552:96//Hs.17424:AA190569  
R-NT2RM4002623//ESTs, Weakly similar to ASPARTYL-TRNA SYNTHETASE [Thermu  
s aquaticus thermophilus]//9.6e-28:194:87//Hs.59346:AI126802  
R-NT2RP2000001//ESTs//2.6e-80:386:99//Hs.105061:N45096  
R-NT2RP2000006//Thromboxane A2 receptor//7.2e-37:253:84//Hs.89887:D38081  
R-NT2RP2000008//Zinc finger protein 37a (K0X 21)//5.2e-25:366:67//Hs.544  
88:X69115  
R-NT2RP2000027//ESTs//9.5e-74:377:96//Hs.96557:AA286713  
R-NT2RP2000040//Homo sapiens mRNA for KIAA0747 protein, partial cds//2.7  
e-42:223:96//Hs.8309:AB018290  
R-NT2RP2000045//Homo sapiens tumorous imaginal discs protein Tid56 homol  
og (TID1) mRNA, complete cds//4.3e-64:309:98//Hs.6216:AF061749

R-NT2RP2000054//EST//1.2e-71:375:96//Hs.98835:AA435798  
R-NT2RP2000056//EST//2.8e-28:342:69//Hs.135526:AI094910  
R-NT2RP2000067//ESTs, Weakly similar to tenascin-like protein [D.melanogaster] //2.3e-35:199:94//Hs.41793:AA775879  
R-NT2RP2000070//ESTs, Weakly similar to proto-cadherin 3 [R.norvegicus] //1.4e-78:383:98//Hs.58254:W72881  
R-NT2RP2000076//EST//0.0014:227:63//Hs.136761:AA738097  
R-NT2RP2000077//Homo sapiens growth arrest specific 11 (GAS11) mRNA, complete cds//1.1e-78:379:97//Hs.54877:AF050078  
R-NT2RP2000079//Homo sapiens RET finger protein-like 1 antisense transcript, partial//2.9e-21:232:75//Hs.102576:AJ010230  
R-NT2RP2000088//Homo sapiens mRNA for KIAA0795 protein, partial cds//1.8e-75:378:96//Hs.22926:AB018338  
R-NT2RP2000091//Carcinoembryonic antigen gene family member 6//0.030:236:63//Hs.41:D90064  
R-NT2RP2000097//ESTs//4.2e-15:92:97//Hs.7432:AA281757  
R-NT2RP2000098//ESTs//9.0e-53:279:94//Hs.87807:AA813827  
R-NT2RP2000108//EST//1.5e-75:378:96//Hs.162105:AA524419  
R-NT2RP2000114//Homo sapiens mRNA for GM3 synthase, complete cds//5.8e-76:386:95//Hs.17706:AB018356  
R-NT2RP2000120//ESTs, Weakly similar to HYPOTHETICAL 68.7 KD PROTEIN ZK757.1 IN CHROMOSOME III [C.elegans] //1.9e-19:153:86//Hs.5268:W22670  
R-NT2RP2000126//ESTs//1.0e-55:293:95//Hs.14570:AI422099  
R-NT2RP2000133//ESTs//0.24:354:59//Hs.157564:AI356513  
R-NT2RP2000147//ESTs, Highly similar to CLATHRIN COAT ASSEMBLY PROTEIN AP47 [Mus musculus] //3.0e-89:457:95//Hs.3832:AI208601  
R-NT2RP2000153//EST//0.0039:93:68//Hs.140386:AA773548  
R-NT2RP2000157//ESTs//1.1e-53:322:91//Hs.6877:AA040820  
R-NT2RP2000161//ESTs//1.6e-99:492:97//Hs.21738:AI188190

R-NT2RP2000175//ESTs//1.4e-98:489:96//Hs.4849:AI143741  
R-NT2RP2000183//ESTs//9.0e-72:358:96//Hs.4856:N51373  
R-NT2RP2000195//ESTs//3.9e-92:439:98//Hs.145091:AA814510  
R-NT2RP2000205//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING  
ENTRY !!!! [H.sapiens]//1.4e-80:415:95//Hs.11807:T86897  
R-NT2RP2000224//RNA polymerase II, polypeptide C (33kD)//1.1e-57:306:94/  
/Hs.79402:AC004382  
R-NT2RP2000232  
R-NT2RP2000233//ESTs//1.1e-08:63:96//Hs.124861:AI090683  
R-NT2RP2000239//ESTs//5.3e-87:427:96//Hs.86211:AA604379  
R-NT2RP2000248//ESTs, Weakly similar to O-linked GlcNAc transferase [H.s  
apiens]//1.3e-95:454:99//Hs.102057:AA649005  
R-NT2RP2000257//ESTs//5.1e-58:282:99//Hs.122565:AI126840  
R-NT2RP2000258//EST//1.0:67:68//Hs.61812:AA035649  
R-NT2RP2000270//ESTs, Weakly similar to LINE-1 REVERSE TRANSCRIPTASE HOM  
OLOG [Homo sapiens]//8.4e-59:298:96//Hs.16085:AI261382  
R-NT2RP2000274//ESTs//7.5e-61:296:98//Hs.86081:AA196635  
R-NT2RP2000288//ESTs//1.8e-56:305:93//Hs.7579:AA775865  
R-NT2RP2000289  
R-NT2RP2000297//ESTs, Highly similar to MKR2 PROTEIN [Mus musculus]//9.  
8e-106:494:99//Hs.102951:AA574249  
R-NT2RP2000298//ESTs//2.1e-62:256:90//Hs.8737:W22712  
R-NT2RP2000310//Human proline dehydrogenase/proline oxidase (PRODH) mRNA  
, complete cds//2.8e-39:222:93//Hs.58218:U82381  
R-NT2RP2000327//Homo sapiens DNA sequence from PAC 434014 on chromosome  
1q32.3.-41. Contains the HSD11B1 gene for Hydroxysteroid (11-beta) Dehyd  
rogenase 1, the ADORA2BP adenosine A2b receptor LIKE pseudogene, the IRF  
6 gene for Interferon Regulatory Factor 6 and two unknown genes. Contain  
s ESTs and GSSs//2.9e-71:342:98//Hs.87684:AL022398

R-NT2RP2000329//ESTs, Highly similar to GTP:AMP PHOSPHOTRANSFERASE MITO  
CHONDRIAL [Bos taurus]//3.4e-69:371:94//Hs.43436:N32441

R-NT2RP2000337//ESTs//5.2e-79:411:95//Hs.101799:AI276062

R-NT2RP2000346//Homo sapiens apoptosis associated protein (GADD34) mRNA,  
complete cds//1.1e-47:262:94//Hs.76556:U83981

R-NT2RP2000369//ESTs//4.3e-102:531:94//Hs.15855:H98103

R-NT2RP2000414//Homo sapiens HnRNP F protein mRNA, complete cds//8.4e-09  
:93:83//Hs.808:L28010

R-NT2RP2000420//ESTs//8.2e-24:142:94//Hs.144893:AI222324

R-NT2RP2000422//Homo sapiens N-acetylglucosamine-phosphate mutase mRNA,  
complete cds//4.2e-20:140:90//Hs.5819:AF102265

R-NT2RP2000438//ESTs, Weakly similar to misato [D.melanogaster]//1.3e-65  
:362:93//Hs.22197:AI151425

R-NT2RP2000448//ESTs, Highly similar to HYPOTHETICAL 51.6 KD PROTEIN IN  
PAP1-MRPL13 INTERGENIC REGION [Saccharomyces cerevisiae]//3.6e-75:435:9  
2//Hs.21938:W81045

R-NT2RP2000459//ESTs//2.8e-95:527:93//Hs.103422:AI352013

R-NT2RP2000498//ESTs//2.3e-17:119:79//Hs.161714:AA229078

R-NT2RP2000503//ESTs//5.2e-91:438:98//Hs.152335:AI290215

R-NT2RP2000510//Homo sapiens KIAA0436 mRNA, partial cds//0.13:455:58//Hs  
.110:AB007896

R-NT2RP2000516//ESTs//9.9e-63:376:89//Hs.47546:AA181348

R-NT2RP2000523

R-NT2RP2000603//Homo sapiens mRNA for KIAA0572 protein, partial cds//3.5  
e-30:167:97//Hs.14409:AB011144

R-NT2RP2000617//ESTs//9.5e-103:493:98//Hs.9412:W72446

R-NT2RP2000634//Homo sapiens mRNA for KIAA0614 protein, partial cds//8.1  
e-66:335:96//Hs.7314:AB014514

R-NT2RP2000644//ESTs//1.1e-18:372:63//Hs.82419:AA789222

R-NT2RP2000656//ESTs//1.0e-10:128:80//Hs.23977:AA115275  
 R-NT2RP2000658//ESTs//0.31:278:59//Hs.15661:W02396  
 R-NT2RP2000668//ESTs//8.2e-40:255:88//Hs.113310:R16767  
 R-NT2RP2000678//ESTs//2.6e-53:271:96//Hs.23790:N99347  
 R-NT2RP2000710//ESTs//0.49:190:63//Hs.145521:AI261368  
 R-NT2RP2000715//EST//1.2e-87:418:99//Hs.139425:AA429279  
 R-NT2RP2000731//EST//5.3e-65:322:97//Hs.136754:AA713965  
 R-NT2RP2000758//ESTs//1.0:187:61//Hs.10545:N62642  
 R-NT2RP2000764//ESTs//5.8e-84:485:91//Hs.121816:AA775419  
 R-NT2RP2000809  
 R-NT2RP2000812//ESTs//1.2e-45:231:97//Hs.121028:AA902745  
 R-NT2RP2000814//ESTs//6.3e-87:433:97//Hs.145479:AA969404  
 R-NT2RP2000816//ESTs//0.45:100:69//Hs.147529:AA458918  
 R-NT2RP2000819  
 R-NT2RP2000841//ESTs//1.9e-73:351:99//Hs.116385:AI224511  
 R-NT2RP2000842//TUMOR NECROSIS FACTOR-INDUCIBLE PROTEIN TSG-6 PRECURSOR/  
 /4.6e-10:247:66//Hs.29352:M31165  
 R-NT2RP2000845//ESTs//2.8e-91:443:97//Hs.66810:AI206552  
 R-NT2RP2000863//ESTs//4.3e-49:310:88//Hs.104336:W07345  
 R-NT2RP2000880//Homo sapiens mRNA for KIAA0741 protein, complete cds//2.  
 8e-43:277:89//Hs.3615:AB018284  
 R-NT2RP2000892//ESTs//2.8e-50:258:96//Hs.119238:AA476267  
 R-NT2RP2000931//MATRIN 3//7.2e-57:290:96//Hs.78825:AB018266  
 R-NT2RP2000938//ESTs, Highly similar to HYPOTHETICAL 6.3 KD PROTEIN ZK6  
 52.2 IN CHROMOSOME III [Caenorhabditis elegans]//3.9e-37:199:95//Hs.1123  
 18:AA186477  
 R-NT2RP2000943//Homo sapiens mRNA for KIAA0755 protein, complete cds//9.  
 8e-98:494:96//Hs.19822:AB018298  
 R-NT2RP2000965//EST//0.22:223:60//Hs.105703:AA487021

R-NT2RP2000970//EST//8.7e-06:255:62//Hs.149202:AI246481  
 R-NT2RP2000985//ESTs, Weakly similar to HYPOTHETICAL 96.8 KD PROTEIN IN  
 SIS2-MTD1 INTERGENIC REGION [S.cerevisiae]//7.8e-92:468:95//Hs.12124:AA5  
 22537  
 R-NT2RP2000987//ESTs//4.5e-78:419:93//Hs.21968:H97521  
 R-NT2RP2001036//EST//2.0e-33:148:82//Hs.163196:AA767643  
 R-NT2RP2001044//ESTs//5.6e-95:493:95//Hs.21958:AA453660  
 R-NT2RP2001065//ESTs//3.6e-28:153:96//Hs.119314:AA432108  
 R-NT2RP2001070//EST//0.30:94:67//Hs.94289:N73665  
 R-NT2RP2001094//EST//0.75:101:69//Hs.161040:H82068  
 R-NT2RP2001119  
 R-NT2RP2001127//Homo sapiens mRNA for HRIHFB2060, partial cds//1.5e-56:3  
 04:94//Hs.146282:AB015348  
 R-NT2RP2001137  
 R-NT2RP2001149//ESTs//5.1e-66:324:97//Hs.27475:AA704512  
 R-NT2RP2001168//ESTs//2.0e-98:539:92//Hs.77870:AI188145  
 R-NT2RP2001173//Homo sapiens mRNA for KIAA0480 protein, complete cds//1.  
 5e-96:490:96//Hs.26247:AB007949  
 R-NT2RP2001174//ESTs//2.2e-63:354:93//Hs.24266:R28287  
 R-NT2RP2001196//ESTs//1.4e-83:463:93//Hs.124304:AA825510  
 R-NT2RP2001218//ESTs//1.4e-100:506:96//Hs.93391:AI188402  
 R-NT2RP2001226//EST//0.0074:154:63//Hs.128612:AA909358  
 R-NT2RP2001233//ESTs, Highly similar to ZINC FINGER PROTEIN ZFP-36 [Hom  
 o sapiens]//3.7e-65:538:80//Hs.44014:AA632298  
 R-NT2RP2001245//ESTs//5.2e-90:447:97//Hs.14559:H92996  
 R-NT2RP2001268//Homo sapiens mRNA for KIAA0810 protein, partial cds//1.5  
 e-112:544:97//Hs.7531:AB018353  
 R-NT2RP2001277//ESTs//2.0e-81:387:99//Hs.13751:AA908229  
 R-NT2RP2001290//ESTs//2.4e-91:501:92//Hs.12600:AA044775

R-NT2RP2001295//ESTs//1.4e-70:337:99//Hs.123854:AA412665  
 R-NT2RP2001312//ESTs//4.6e-53:276:95//Hs.7961:AA401205  
 R-NT2RP2001327//ESTs, Moderately similar to tumor necrosis factor-alpha-induced protein B12 [H.sapiens] //2.3e-43:238:93//Hs.106632:N25679  
 R-NT2RP2001328//ESTs//5.1e-99:499:96//Hs.34868:AI341138  
 R-NT2RP2001347//ESTs//6.7e-05:100:77//Hs.9536:AA114178  
 R-NT2RP2001378//ESTs//4.2e-83:456:93//Hs.10554:N50028  
 R-NT2RP2001381//ESTs//1.1e-26:148:96//Hs.161859:AA444038  
 R-NT2RP2001392//ESTs, Weakly similar to MITOCHONDRIAL LON PROTEASE HOMOLOG PRECURSOR [H.sapiens] //3.9e-74:411:93//Hs.47305:AA195153  
 R-NT2RP2001394//ESTs//9.5e-54:305:93//Hs.70256:R07875  
 R-NT2RP2001397//ESTs, Highly similar to G2/MITOTIC-SPECIFIC CYCLIN B2 [Mesocricetus auratus] //5.2e-97:469:97//Hs.20483:AA522505  
 R-NT2RP2001420//ESTs//1.6e-49:228:88//Hs.163602:N32030  
 R-NT2RP2001423//ESTs//2.0e-37:190:99//Hs.101565:R35431  
 R-NT2RP2001427//EST//1.7e-11:107:84//Hs.148584:AI201728  
 R-NT2RP2001436//ESTs, Weakly similar to F02D8.3 [C.elegans] //2.9e-114:558:97//Hs.7627:AI341556  
 R-NT2RP2001440//EST//0.17:192:58//Hs.133442:AI061394  
 R-NT2RP2001445//ESTs//1.1e-43:215:100//Hs.145497:AA501453  
 R-NT2RP2001449//ESTs//4.1e-08:234:61//Hs.134067:AI076765  
 R-NT2RP2001450//ESTs//9.5e-65:356:94//Hs.61829:AI079539  
 R-NT2RP2001467//Small inducible cytokine A5 (RANTES)//1.2e-34:255:83//Hs.155464:AF088219  
 R-NT2RP2001506//ESTs//2.9e-23:170:88//Hs.7147:T23513  
 R-NT2RP2001511//ESTs//2.0e-08:59:100//Hs.57660:AA251146  
 R-NT2RP2001520//Homo sapiens mRNA for mitochondrial carrier protein ARAL AR1//6.7e-106:545:95//Hs.4277:Y14494  
 R-NT2RP2001526//ESTs//3.7e-23:295:72//Hs.8514:AF039240



R-NT2RP2001536//Homo sapiens X-ray repair cross-complementing protein 3 (XRCC3) mRNA, complete cds//1.9e-15:99:95//Hs.99742:AF035586

R-NT2RP2001560//ESTs//2.2e-58:310:94//Hs.87454:AA732816

R-NT2RP2001569//Homo sapiens mRNA, chromosome 1 specific transcript KIAA 0488//2.0e-76:387:96//Hs.67619:AB007957

R-NT2RP2001576//Human mRNA for KIAA0105 gene, complete cds//0.17:193:60//Hs.119:D14661

R-NT2RP2001581//ESTs//5.1e-08:107:78//Hs.157114:T58884

R-NT2RP2001597//EST//5.2e-22:151:88//Hs.158613:AI369995

R-NT2RP2001601//ESTs//1.5e-78:373:99//Hs.137558:AI393767

R-NT2RP2001613

R-NT2RP2001628//EST//0.99:195:60//Hs.144238:W52294

R-NT2RP2001663//ESTs//4.0e-37:282:84//Hs.12319:W56090

R-NT2RP2001677//ESTs//1.4e-44:232:96//Hs.159387:AI370845

R-NT2RP2001678//ESTs//0.91:124:60//Hs.10593:AI201336

R-NT2RP2001699//EST//0.0033:230:61//Hs.146544:AI125323

R-NT2RP2001720//ESTs//1.8e-52:255:99//Hs.101064:AA290579

R-NT2RP2001721//ESTs//7.0e-101:479:99//Hs.129750:AA987538

R-NT2RP2001740//ESTs//3.3e-76:379:96//Hs.144704:AI147100

R-NT2RP2001748//ESTs//1.4e-44:352:81//Hs.142259:AA828840

R-NT2RP2001762//Homo sapiens exonuclease 1a (EXO1a) mRNA, complete cds//2.1e-105:519:96//Hs.47504:AF091754

R-NT2RP2001813//ESTs//6.3e-78:406:95//Hs.21902:R44037

R-NT2RP2001861

R-NT2RP2001869//EST//2.8e-21:173:82//Hs.130321:AI002941

R-NT2RP2001876//ESTs//6.1e-102:526:95//Hs.4944:AA533088

R-NT2RP2001883//ESTs, Weakly similar to No definition line found [C.elegans]//6.9e-110:556:95//Hs.23159:AA113849

R-NT2RP2001900//ESTs//6.9e-85:442:95//Hs.154220:AA171724

R-NT2RP2001907//ESTs//2.1e-82:432:94//Hs.142257:AA188423  
 R-NT2RP2001926//EST//2.3e-24:299:71//Hs.135085:AI097268  
 R-NT2RP2001936//ESTs//1.1e-45:265:92//Hs.112482:T66087  
 R-NT2RP2001943//EST//1.4e-05:246:61//Hs.144096:AI032180  
 R-NT2RP2001946//ESTs//3.6e-87:410:99//Hs.20242:W72594  
 R-NT2RP2001947//ESTs//1.9e-55:338:88//Hs.58582:T72588  
 R-NT2RP2001969  
 R-NT2RP2001976//ESTs//1.2e-98:499:95//Hs.121028:AA902745  
 R-NT2RP2001985//ESTs, Weakly similar to GTPASE-ACTIVATING PROTEIN SPA-1  
 [M.musculus]//8.3e-15:118:89//Hs.18760:AA166678  
 R-NT2RP2002025//ESTs//2.1e-82:393:98//Hs.159488:AI378233  
 R-NT2RP2002032//ESTs//4.4e-98:531:91//Hs.93836:AA813332  
 R-NT2RP2002033//ESTs//3.5e-43:229:96//Hs.30563:AA102627  
 R-NT2RP2002041  
 R-NT2RP2002046//ESTs//1.6e-101:476:99//Hs.101107:AA825938  
 R-NT2RP2002047//ESTs//9.1e-85:431:95//Hs.116750:AA629895  
 R-NT2RP2002058//ESTs//1.3e-31:163:99//Hs.33085:AA258068  
 R-NT2RP2002066//ESTs//1.9e-87:459:93//Hs.118871:AA846091  
 R-NT2RP2002070//ESTs//4.1e-63:332:96//Hs.156446:T92265  
 R-NT2RP2002076//Homo sapiens clone 24804 mRNA sequence//1.7e-26:178:87//  
 Hs.11039:AF052183  
 R-NT2RP2002079//ESTs//1.2e-79:389:97//Hs.135214:AI350524  
 R-NT2RP2002099//Homo sapiens mRNA for E1B-55kDa-associated protein//1.5e  
 -60:376:89//Hs.155218:AJ007509  
 R-NT2RP2002105//ESTs//8.4e-54:313:90//Hs.98702:AI123000  
 R-NT2RP2002124//ESTs//6.6e-81:431:93//Hs.127326:AA525134  
 R-NT2RP2002137//Deoxycytidine kinase//0.29:183:62//Hs.709:M60527  
 R-NT2RP2002154//ESTs//9.6e-97:539:91//Hs.18624:AA523268  
 R-NT2RP2002172//EST//0.69:53:75//Hs.156238:AI334495

R-NT2RP2002185//ESTs, Weakly similar to F15C11.2 [C.elegans] //1.4e-54:26  
9:98//Hs.107201:W52859

R-NT2RP2002192//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING  
ENTRY !!!! [H.sapiens] //3.9e-15:245:71//Hs.87578:AI125363

R-NT2RP2002193//ESTs//3.5e-79:453:90//Hs.76578:AI290672

R-NT2RP2002208//ESTs//2.0e-72:347:99//Hs.164028:AI003946

R-NT2RP2002219//EST//0.039:229:63//Hs.149830:AI287499

R-NT2RP2002231//ESTs//3.3e-64:337:94//Hs.79828:AA642341

R-NT2RP2002252//ESTs, Highly similar to co-repressor protein [M.musculus  
] //5.4e-48:238:99//Hs.22583:AA188168

R-NT2RP2002256//Homo sapiens retinoic acid hydroxylase mRNA, complete cd  
s//1.6e-15:131:83//Hs.150595:AF005418

R-NT2RP2002259//Human L-myc protein gene, complete cds//5.3e-99:548:91//  
Hs.92137:M19720

R-NT2RP2002270//ESTs, Weakly similar to AF-9 PROTEIN [H.sapiens] //4.8e-1  
00:550:91//Hs.4029:Z78373

R-NT2RP2002292//ESTs, Weakly similar to F13B12.1 [C.elegans] //3.2e-92:48  
2:93//Hs.5570:AI377863

R-NT2RP2002312//Homo sapiens CDP-diacylglycerol synthase 2. (CDS2) mRNA,  
partial cds//4.1e-103:527:94//Hs.24812:AF069532

R-NT2RP2002316//ESTs//4.2e-91:425:100//Hs.3350:AI368015

R-NT2RP2002325//Homo sapiens peroxisomal biogenesis factor (PEX11a) mRNA  
, complete cds//1.2e-112:567:95//Hs.31034:AB015594

R-NT2RP2002333//ESTs//1.9e-86:483:91//Hs.155198:AA767372

R-NT2RP2002385//Homo sapiens synaptic glycoprotein SC2 spliced variant m  
RNA, complete cds//1.2e-103:600:89//Hs.109051:AF038958

R-NT2RP2002394//ESTs//0.11:158:65//Hs.28792:AI343467

R-NT2RP2002408//ESTs//1.5e-51:278:93//Hs.6044:W22815

R-NT2RP2002426//Homo sapiens mRNA for KIAA0563 protein, complete cds//1.

7e-33:285:80//Hs.15731:AB011135  
R-NT2RP2002439//ESTs//3.2e-12:134:76//Hs.32246:AA464020  
R-NT2RP2002457//ESTs//4.7e-52:282:94//Hs.21968:H97521  
R-NT2RP2002464//ESTs//5.3e-27:148:98//Hs.115660:AI362230  
R-NT2RP2002475//ESTs//3.9e-85:439:94//Hs.9873:W27233  
R-NT2RP2002479//Homo sapiens mRNA for ABC transporter 7 protein, complete cds//9.9e-115:605:92//Hs.125856:AB005289  
R-NT2RP2002498//ESTs//6.3e-37:227:93//Hs.108779:N73180  
R-NT2RP2002503//ESTs//1.9e-54:358:86//Hs.57800:W60838  
R-NT2RP2002504//Homo sapiens mRNA for KIAA0791 protein, complete cds//8.5e-107:583:91//Hs.23255:AB018334  
R-NT2RP2002520//ESTs//4.2e-99:509:94//Hs.32368:AA205305  
R-NT2RP2002537//ESTs//4.2e-105:552:93//Hs.154363:AA533090  
R-NT2RP2002546//Homo sapiens clone TUA8 Cri-du-chat region mRNA//2.6e-109:570:93//Hs.49476:AF009314  
R-NT2RP2002549//DNA polymerase gamma//1.1e-35:189:86//Hs.80961:U60325  
R-NT2RP2002591//ESTs, Weakly similar to ZINC FINGER PROTEIN 84 [H.sapiens]//7.5e-118:564:97//Hs.94549:AA149547  
R-NT2RP2002595//EST//1.4e-15:101:95//Hs.129528:AA994783  
R-NT2RP2002606//ESTs//4.5e-99:475:98//Hs.45046:N40170  
R-NT2RP2002609//ESTs//1.9e-104:568:92//Hs.9175:AI184220  
R-NT2RP2002618//ESTs//0.014:493:57//Hs.96322:AA541615  
R-NT2RP2002621//EST//4.4e-36:252:84//Hs.149580:AI281881  
R-NT2RP2002643//ESTs//6.9e-32:247:74//Hs.33354:AA179944  
R-NT2RP2002672  
R-NT2RP2002701//N-acetylglucosaminidase, alpha- (Sanfilippo disease IIIB //0.99:184:63//Hs.50727:U43572  
R-NT2RP2002706//EST//2.8e-41:148:86//Hs.161917:AA483223  
R-NT2RP2002710//EST//0.34:105:71//Hs.136747:AA749210

R-NT2RP2002727//ESTs//8.7e-68:368:94//Hs.14366:T78626  
 R-NT2RP2002736//ESTs//9.7e-98:457:99//Hs.74899:AA993300  
 R-NT2RP2002740//Homo sapiens mRNA for KIAA0536 protein, partial cds//0.6  
 6:360:59//Hs.119139:AB011108  
 R-NT2RP2002741//ESTs//3.1e-102:489:98//Hs.112024:AI042352  
 R-NT2RP2002750//EST//3.6e-43:166:86//Hs.162404:AA573131  
 R-NT2RP2002752//ESTs//5.0e-56:355:89//Hs.95867:M62042  
 R-NT2RP2002753//ESTs//1.7e-49:262:96//Hs.49005:W89124  
 R-NT2RP2002769//ESTs//1.3e-59:376:88//Hs.4046:H03587  
 R-NT2RP2002778//Homo sapiens clone 24606 mRNA sequence//4.0e-65:341:94//  
 Hs.17481:AF070537  
 R-NT2RP2002800//ESTs//6.5e-08:79:84//Hs.153262:AA551124  
 R-NT2RP2002839//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING  
 ENTRY !!!! [H.sapiens]//1.6e-100:501:97//Hs.136202:AA206578  
 R-NT2RP2002857//ESTs//4.3e-94:463:97//Hs.134292:AA603031  
 R-NT2RP2002862//ESTs//2.3e-42:302:82//Hs.117969:H94870  
 R-NT2RP2002880  
 R-NT2RP2002891  
 R-NT2RP2002925//ESTs//1.3e-103:564:92//Hs.142079:AA182894  
 R-NT2RP2002928//ESTs//3.9e-108:502:99//Hs.29105:AA574143  
 R-NT2RP2002929//ESTs//4.1e-106:499:99//Hs.44743:AA837096  
 R-NT2RP2002954//ESTs//2.6e-88:417:99//Hs.100824:AI308771  
 R-NT2RP2002959//ESTs//7.5e-101:489:97//Hs.32690:N57480  
 R-NT2RP2002979//ESTs//5.4e-06:197:65//Hs.146726:AI147060  
 R-NT2RP2002980//ESTs//1.0e-110:562:96//Hs.28444:AA083213  
 R-NT2RP2002986//ESTs, Highly similar to RING CANAL PROTEIN [Drosophila  
 melanogaster]//3.1e-119:578:97//Hs.106290:AI125291  
 R-NT2RP2002987//Human mRNA for KIAA0331 gene, complete cds//1.0:78:74//H  
 s.146395:AB002329

R-NT2RP2002993//ESTs, Weakly similar to DNA-DIRECTED RNA POLYMERASE II 1  
40 KD POLYPEPTIDE [H.sapiens]//2.4e-98:467:98//Hs.86337:AA149311

R-NT2RP2003000//ESTs//0.0070:400:61//Hs.138506:U85642

R-NT2RP2003034//ESTs//9.3e-87:408:96//Hs.164042:H12594

R-NT2RP2003073//Human transporter protein (g17) mRNA, complete cds//0.95  
:259:61//Hs.76460:U49082

R-NT2RP2003099//Thromboxane A2 receptor//2.6e-42:328:81//Hs.89887:D38081

R-NT2RP2003108//ESTs//2.3e-82:398:98//Hs.5105:AA115512

R-NT2RP2003117//Human mRNA for KIAA0347 gene, complete cds//2.4e-49:336:  
86//Hs.101996:AB002345

R-NT2RP2003121//ESTs//2.0e-75:380:96//Hs.133127:AA133355

R-NT2RP2003125

R-NT2RP2003129//EST//0.68:115:69//Hs.122196:AA780986

R-NT2RP2003137//ESTs//2.1e-37:259:85//Hs.63169:N78506

R-NT2RP2003161//ESTs//2.5e-88:451:96//Hs.29041:W37379

R-NT2RP2003164//ESTs//4.3e-113:543:97//Hs.8980:AA629067

R-NT2RP2003165//ESTs//6.9e-83:486:89//Hs.138632:H97952

R-NT2RP2003177//ESTs//0.47:38:100//Hs.61790:AA421156

R-NT2RP2003194//ESTs//4.7e-118:582:96//Hs.27266:AA053816

R-NT2RP2003206//ESTs//0.032:388:58//Hs.122148:AA442074

R-NT2RP2003230//ESTs//8.8e-103:478:99//Hs.40140:AI079253

R-NT2RP2003237//ESTs//2.7e-76:392:96//Hs.106278:R37661

R-NT2RP2003243//ESTs//3.6e-53:300:92//Hs.118793:AA192438

R-NT2RP2003265//ESTs, Highly similar to protein NGD5 [M.musculus]//3.3e-  
110:557:96//Hs.24994:AA236937

R-NT2RP2003272//ESTs, Weakly similar to F15C11.2 [C.elegans]//1.2e-34:22  
8:89//Hs.107201:W52859

R-NT2RP2003277//Homo sapiens mRNA for KIAA0625 protein, partial cds//1.4  
e-111:565:95//Hs.154919:AB014525

R-NT2RP2003280//ESTs//2.6e-101:541:94//Hs.6982:AA622427  
R-NT2RP2003286//ESTs//1.2e-104:497:98//Hs.113052:AI222106  
R-NT2RP2003293//Human mRNA for KIAA0118 gene, partial cds//9.1e-44:458:74//Hs.154326:D42087  
R-NT2RP2003295//Protein serine/threonine kinase stk2//0.31:321:57//Hs.1087:L20321  
R-NT2RP2003297//ESTs//3.0e-15:118:87//Hs.16621:AA098874  
R-NT2RP2003308//ESTs, Moderately similar to CROOKED NECK PROTEIN [Drosophila melanogaster]//4.8e-109:553:96//Hs.26089:AA195126  
R-NT2RP2003329//ESTs//0.99:208:62//Hs.143607:AI424948  
R-NT2RP2003339//ESTs//1.3e-85:441:96//Hs.24115:N32618  
R-NT2RP2003347//ESTs//1.5e-70:365:96//Hs.155773:AI312825  
R-NT2RP2003367//EST//5.8e-80:376:100//Hs.112500:AA599014  
R-NT2RP2003391//ESTs//2.8e-98:484:97//Hs.5842:AA534476  
R-NT2RP2003393//ESTs//2.0e-96:510:93//Hs.75844:AA115502  
R-NT2RP2003394//EST//5.2e-06:264:63//Hs.144234:W52249  
R-NT2RP2003401//ESTs//6.1e-25:161:90//Hs.155360:AA984683  
R-NT2RP2003433//ESTs, Highly similar to PROTEIN TRANSPORT PROTEIN SEC61 ALPHA SUBUNIT [Canis familiaris]//1.2e-106:508:98//Hs.131840:AI016073  
R-NT2RP2003445//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING ENTRY !!!! [H.sapiens]//5.6e-21:161:70//Hs.43153:N22360  
R-NT2RP2003446//ESTs, Weakly similar to C27H6.4 [C.elegans]//6.0e-105:529:96//Hs.8055:W60903  
R-NT2RP2003456//ESTs//7.5e-96:449:99//Hs.25362:AI277332  
R-NT2RP2003480//ESTs//1.6e-116:583:96//Hs.59757:AA176121  
R-NT2RP2003499//ESTs, Weakly similar to elastin like protein [D.melanogaster]//7.0e-71:365:95//Hs.101056:R52777  
R-NT2RP2003506//ESTs, Weakly similar to ORF YPL207w [S.cerevisiae]//2.3e-115:577:96//Hs.16277:N36831

R-NT2RP2003511//ESTs//1.6e-22:182:85//Hs.28249:AA203733  
 R-NT2RP2003513//Human mRNA for KIAA0270 gene, partial cds//1.3e-108:566:  
 94//Hs.78482:Y16270  
 R-NT2RP2003517//Platelet-derived growth factor beta polypeptide (simian  
 sarcoma viral (v-sis) oncogene homolog)//4.9e-62:518:79//Hs.1976:M12783  
 R-NT2RP2003522//ESTs//2.0e-97:462:99//Hs.24512:D60170  
 R-NT2RP2003533//ESTs//4.4e-45:273:78//Hs.140225:AA704101  
 R-NT2RP2003543//EST//1.0:80:68//Hs.65646:F13684  
 R-NT2RP2003559//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING  
 ENTRY !!!! [H.sapiens]//1.8e-58:316:94//Hs.28891:W72439  
 R-NT2RP2003564//ESTs//3.2e-112:528:99//Hs.53940:N46696  
 R-NT2RP2003581//ESTs//1.3e-88:506:93//Hs.16157:AA203719  
 R-NT2RP2003596//ESTs, Weakly similar to No definition line found [C.eleg  
 ans]//4.7e-101:495:98//Hs.34627:AA126463  
 R-NT2RP2003604//Homo sapiens alpha-catenin related protein (ACRP) mRNA,  
 complete cds//1.7e-103:501:97//Hs.58488:U97067  
 R-NT2RP2003629//EST//0.032:440:59//Hs.135297:AI038981  
 R-NT2RP2003643//ESTs, Weakly similar to HYPOTHETICAL 14.1 KD PROTEIN IN  
 MURZ-RPON INTERGENIC REGION [E.coli]//9.1e-62:359:92//Hs.12492:AA203188  
 R-NT2RP2003668//EST//9.4e-110:535:97//Hs.116279:AA628951  
 R-NT2RP2003687//EST//5.9e-05:196:65//Hs.139064:AA135523  
 R-NT2RP2003691//ESTs, Weakly similar to F59C6.9 [C.elegans]//1.0:202:62/  
 /Hs.65539:AI148540  
 R-NT2RP2003702//ESTs, Moderately similar to ovarian-specific protein [R.  
 norvegicus]//4.3e-99:492:96//Hs.93332:AA811920  
 R-NT2RP2003704//ESTs//1.0:155:63//Hs.104166:AA740246  
 R-NT2RP2003706//Homo sapiens mRNA for KIAA0525 protein, partial cds//8.4  
 e-47:265:93//Hs.78494:AB011097  
 R-NT2RP2003713//EST//0.81:210:59//Hs.14551:T79401



R-NT2RP2003714//ESTs//1.7e-99:495:96//Hs.158101:AI365003  
 R-NT2RP2003727//Human 19.8 kDa protein mRNA, complete cds//0.84:221:60//  
 Hs.2384:U18914  
 R-NT2RP2003737//ESTs, Highly similar to UBIQUITIN-CONJUGATING ENZYME E2  
 -17 KD [Caenorhabditis elegans]//2.4e-50:302:90//Hs.19196:W74577  
 R-NT2RP2003751  
 R-NT2RP2003760//ESTs//2.6e-101:548:93//Hs.115987:AA483808  
 R-NT2RP2003764//ESTs//8.2e-25:134:98//Hs.64036:AA127709  
 R-NT2RP2003769//ESTs//1.7e-108:545:95//Hs.56847:AA541606  
 R-NT2RP2003770//Homo sapiens sperm acrosomal protein mRNA, complete cds/  
 /6.0e-106:531:96//Hs.90436:AF047437  
 R-NT2RP2003777//ESTs//2.6e-59:323:94//Hs.10101:AI381811  
 R-NT2RP2003781//ESTs//2.0e-25:269:75//Hs.144951:N34836  
 R-NT2RP2003793//ESTs//8.7e-94:466:97//Hs.93949:AA782955  
 R-NT2RP2003840//ESTs//3.4e-97:533:93//Hs.16130:AA195077  
 R-NT2RP2003857//H.sapiens mRNA for G9a//2.8e-23:351:65//Hs.75196:X69838  
 R-NT2RP2003859//ESTs//3.0e-07:96:81//Hs.153262:AA551124  
 R-NT2RP2003871//ESTs//1.9e-102:509:97//Hs.25726:AA430167  
 R-NT2RP2003885//ESTs//1.0e-102:502:97//Hs.36353:AA702341  
 R-NT2RP2003912//EST//1.2e-38:336:76//Hs.134975:AI094611  
 R-NT2RP2003952//Homo sapiens DNA-binding protein (CROC-1B) mRNA, complet  
 e cds//0.90:190:60//Hs.75875:U49278  
 R-NT2RP2003968//Homo sapiens hUBP mRNA for ubiquitin specific protease,  
 complete cds//7.6e-116:568:97//Hs.35086:AB014458  
 R-NT2RP2003976//Homo sapiens mRNA for KIAA0447 protein, complete cds//3.  
 6e-109:540:97//Hs.7302:AB007916  
 R-NT2RP2003981//Homo sapiens mRNA for KIAA0804 protein, partial cds//2.5  
 e-115:568:96//Hs.7316:AB018347  
 R-NT2RP2003984

R-NT2RP2003986//ESTs//4.9e-36:272:82//Hs.158268:AA738087  
R-NT2RP2003988//ESTs, Weakly similar to reverse transcriptase [H.sapiens  
]//3.2e-110:519:99//Hs.36093:AI149968  
R-NT2RP2004014//ESTs//8.4e-102:483:99//Hs.22867:AI417478  
R-NT2RP2004041  
R-NT2RP2004042//ESTs//1.5e-105:466:97//Hs.7296:N29706  
R-NT2RP2004066//ESTs//1.4e-110:559:96//Hs.71916:AA219699  
R-NT2RP2004081//ESTs//3.7e-105:503:98//Hs.27542:AA977204  
R-NT2RP2004098//EST//7.3e-26:203:87//Hs.21897:R41461  
R-NT2RP2004124//ESTs//1.1e-83:435:95//Hs.43299:N23036  
R-NT2RP2004142//EST//1.3e-06:165:65//Hs.146742:AI147500  
R-NT2RP2004152//ESTs//7.0e-98:455:100//Hs.17731:AI342241  
R-NT2RP2004165//ESTs, Highly similar to DYNEIN BETA CHAIN, CILIARY [Ant  
hocidaris crassispina]//1.0e-118:583:97//Hs.16520:AI224533  
R-NT2RP2004170//ESTs//6.7e-66:407:88//Hs.157138:AI348544  
R-NT2RP2004172//ESTs//1.5e-109:567:95//Hs.159091:AA033974  
R-NT2RP2004187//ESTs//3.6e-92:488:93//Hs.22954:W26589  
R-NT2RP2004194//ESTs//6.2e-114:585:95//Hs.18778:AA203167  
R-NT2RP2004196  
R-NT2RP2004207//ESTs//6.3e-102:488:98//Hs.22678:AA604756  
R-NT2RP2004226//ESTs//8.8e-18:252:71//Hs.11924:W26972  
R-NT2RP2004232//ESTs, Highly similar to protein kinase C mu [H.sapiens] /  
/5.2e-105:499:98//Hs.143460:AA483305  
R-NT2RP2004239//ESTs//1.2e-16:171:80//Hs.16134:AA203116  
R-NT2RP2004240//Homo sapiens antigen NY-CO-1 (NY-CO-1) mRNA, complete cd  
s//3.4e-103:530:93//Hs.54900:AF039687  
R-NT2RP2004242//ESTs//1.3e-85:460:93//Hs.104535:AA211483  
R-NT2RP2004245//ESTs//6.4e-117:575:97//Hs.23744:AA035744  
R-NT2RP2004270//ESTs//1.0:95:69//Hs.141371:H92187

R-NT2RP2004300//ESTs//4.4e-80:379:99//Hs.130874:AA905056  
 R-NT2RP2004316//Homo sapiens EXT-like protein 2 (EXTL2) mRNA, complete c  
 ds//4.7e-110:544:96//Hs.61152:AF000416  
 R-NT2RP2004321//ESTs//2.1e-18:104:99//Hs.107207:AA044788  
 R-NT2RP2004339//EST//1.4e-47:309:86//Hs.161917:AA483223  
 R-NT2RP2004347  
 R-NT2RP2004364//ESTs//1.1e-113:566:96//Hs.25880:AI268173  
 R-NT2RP2004365//ESTs//0.022:271:62//Hs.38897:AI129310  
 R-NT2RP2004366//ESTs//9.5e-71:335:100//Hs.91867:AI218624  
 R-NT2RP2004373//ESTs//4.2e-25:172:87//Hs.83243:N32192  
 R-NT2RP2004389//ESTs, Highly similar to HYPOTHETICAL 70.7 KD PROTEIN FO  
 9G8.3 IN CHROMOSOME III [Caenorhabditis elegans]//1.4e-11:108:82//Hs.304  
 90:AA146916  
 R-NT2RP2004392//ESTs//3.4e-81:427:94//Hs.5827:AA581646  
 R-NT2RP2004396//EST//5.6e-06:100:77//Hs.138623:H92473  
 R-NT2RP2004399//EST//0.98:337:59//Hs.118446:N67900  
 R-NT2RP2004400//ESTs//2.1e-90:422:100//Hs.152460:AA602921  
 R-NT2RP2004412//ESTs//1.4e-105:503:98//Hs.15929:AA403121  
 R-NT2RP2004425//EST//0.00017:225:60//Hs.146935:AI168124  
 R-NT2RP2004476//ESTs//1.4e-88:477:94//Hs.4859:N29695  
 R-NT2RP2004490//Homo sapiens 3-phosphoinositide dependent protein kinase  
 -1 (PDK1) mRNA, complete cds//8.6e-34:143:98//Hs.154729:AF017995  
 R-NT2RP2004512//ESTs//2.6e-91:426:100//Hs.94133:AI270700  
 R-NT2RP2004523//ESTs//1.6e-74:377:97//Hs.14217:R61320  
 R-NT2RP2004538//Thromboxane A2 receptor//1.4e-45:279:89//Hs.89887:D38081  
 R-NT2RP2004551//ESTs//0.47:147:66//Hs.131519:AI024347  
 R-NT2RP2004568//ESTs//1.3e-107:567:94//Hs.65234:AA195470  
 R-NT2RP2004580//ESTs//5.9e-29:156:98//Hs.147801:AI221661  
 R-NT2RP2004587//ESTs//1.0e-102:495:97//Hs.91662:AA781126

R-NT2RP2004594//ESTs//4.1e-56:298:95//Hs.24641:AA954666  
R-NT2RP2004600//ESTs//4.8e-67:374:93//Hs.49762:N69862  
R-NT2RP2004602//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT  
RY !!!! [H.sapiens] //4.5e-07:149:76//Hs.12845:N28835  
R-NT2RP2004614//ESTs//1.0e-111:557:96//Hs.37892:N53497  
R-NT2RP2004655//Homo sapiens mRNA for leucine rich protein//2.4e-118:587  
:96//Hs.5198:AJ006291  
R-NT2RP2004664//Homo sapiens mRNA for KIAA0460 protein, partial cds//5.9  
e-107:520:96//Hs.29956:AB007929  
R-NT2RP2004675//ESTs//2.7e-82:407:97//Hs.116113:F18930  
R-NT2RP2004681//NUCLEOLIN//0.34:387:58//Hs.79110:M60858  
R-NT2RP2004689//Homo sapiens mRNA for KIAA0625 protein, partial cds//5.0  
e-120:600:96//Hs.154919:AB014525  
R-NT2RP2004709//ESTs//1.1e-106:511:98//Hs.38034:AI149793  
R-NT2RP2004710//ESTs//9.9e-87:477:93//Hs.6834:AA203433  
R-NT2RP2004736//Homo sapiens mRNA for KIAA0478 protein, complete cds//1.  
3e-118:594:96//Hs.4236:AB007947  
R-NT2RP2004743//ESTs//2.1e-48:327:88//Hs.43635:AA447015  
R-NT2RP2004767//EST//4.0e-57:328:81//Hs.142796:N51423  
R-NT2RP2004775//ESTs//9.4e-60:326:94//Hs.115339:AA136774  
R-NT2RP2004791//ESTs//3.2e-82:367:96//Hs.141911:N64013  
R-NT2RP2004799//Homo sapiens ATP-specific succinyl-CoA synthetase beta s  
ubunit (SCS) mRNA, partial cds//8.0e-116:564:96//Hs.40820:AF058953  
R-NT2RP2004802//ESTs//6.5e-111:586:94//Hs.90375:W74579  
R-NT2RP2004816//Homo sapiens H beta 58 homolog mRNA, complete cds//8.7e-  
120:584:97//Hs.67052:AF054179  
R-NT2RP2004841//EST//3.8e-31:323:74//Hs.147714:AI219906  
R-NT2RP2004861//EST//0.92:147:63//Hs.23064:R20803  
R-NT2RP2004897//ESTs//1.7e-46:390:80//Hs.139225:H96567

R-NT2RP2004936//EST//0.97:176:63//Hs.137436:AA280529  
R-NT2RP2004959//ESTs//0.059:137:64//Hs.144109:AI345543  
R-NT2RP2004961//ESTs//1.8e-87:409:100//Hs.138297:AA781941  
R-NT2RP2004962//ESTs//0.0021:292:59//Hs.145917:AI275458  
R-NT2RP2004967//Human mRNA for KIAA0118 gene, partial cds//7.4e-51:506:7  
5//Hs.154326:D42087  
R-NT2RP2004978//ESTs//0.95:138:63//Hs.13619:W93496  
R-NT2RP2004982//ESTs//7.8e-95:468:97//Hs.22545:R43910  
R-NT2RP2004985  
R-NT2RP2004999//ESTs//2.9e-94:450:98//Hs.128766:AI419902  
R-NT2RP2005000  
R-NT2RP2005001//Homo sapiens mRNA for KIAA0615 protein, complete cds//9.  
6e-113:577:95//Hs.155972:AB014515  
R-NT2RP2005003//EST//1.3e-75:387:96//Hs.140843:R42235  
R-NT2RP2005012//Homo sapiens SEC63 (SEC63) mRNA, complete cds//3.1e-116:  
568:97//Hs.31575:AF100141  
R-NT2RP2005018//ESTs//7.5e-46:280:90//Hs.126857:AA932161  
R-NT2RP2005020//ESTs//1.6e-105:554:94//Hs.14846:AA148507  
R-NT2RP2005031//EST//3.1e-79:379:99//Hs.139709:AA227887  
R-NT2RP2005037//ESTs//5.3e-102:551:93//Hs.26516:AA195220  
R-NT2RP2005038//ESTs//5.8e-101:566:92//Hs.46964:N49757  
R-NT2RP2005108  
R-NT2RP2005116//Homo sapiens mRNA for KIAA0664 protein, partial cds//2.7  
e-105:518:97//Hs.22616:AB014564  
R-NT2RP2005126//H.sapiens mRNA for RNA helicase (Myc-regulated dead box  
protein)//4.6e-69:464:85//Hs.100555:X98743  
R-NT2RP2005139//ESTs//1.0e-108:545:95//Hs.21006:AA523383  
R-NT2RP2005140//ESTs//4.3e-90:422:99//Hs.62180:AI341261  
R-NT2RP2005144//ESTs//0.91:162:62//Hs.52399:AI075744

R-NT2RP2005147//ESTs//4.6e-100:502:96//Hs.27931:AA633438  
R-NT2RP2005159//ESTs//7.5e-105:533:95//Hs.109819:AI357582  
R-NT2RP2005162//ESTs//6.6e-83:419:96//Hs.113998:H50648  
R-NT2RP2005168//Homo sapiens mRNA for E1B-55kDa-associated protein//2.4e-101:513:95//Hs.155218:AJ007509  
R-NT2RP2005204//ESTs, Weakly similar to UBIQUITIN-ACTIVATING ENZYME E1 HOMOLOG [H.sapiens]//1.9e-115:577:96//Hs.7600:H98166  
R-NT2RP2005227//Homo sapiens LIM protein mRNA, complete cds//1.0e-45:359:82//Hs.154103:AF061258  
R-NT2RP2005239//ESTs, Highly similar to NIFS-LIKE 54.5 KD PROTEIN [Saccharomyces cerevisiae]//1.0e-47:245:97//Hs.21090:AA418587  
R-NT2RP2005254//ESTs//3.3e-111:581:94//Hs.22549:AA524503  
R-NT2RP2005270//ESTs, Highly similar to HYPOTHETICAL 67.6 KD PROTEIN ZK 637.3 IN CHROMOSOME III [Caenorhabditis elegans]//1.1e-79:412:95//Hs.23047:N66596  
R-NT2RP2005276//ESTs//4.6e-85:426:96//Hs.24550:AA316272  
R-NT2RP2005287//ESTs//1.7e-109:565:94//Hs.61976:AI279001  
R-NT2RP2005288//Homo sapiens RCC1-like G exchanging factor RLG mRNA, complete cds//2.4e-125:594:98//Hs.27007:AF060219  
R-NT2RP2005289//Homo sapiens mRNA for XPR2 protein//4.9e-112:545:96//Hs.44766:AJ007590  
R-NT2RP2005293//ESTs//5.1e-116:538:99//Hs.62180:AI341261  
R-NT2RP2005315//ESTs//1.4e-82:415:97//Hs.155829:AA018338  
R-NT2RP2005325//Human LIM-homeobox domain protein (hLH-2) mRNA, complete cds//2.5e-45:272:91//Hs.1569:U11701  
R-NT2RP2005336//ESTs//1.9e-93:444:99//Hs.110966:AA151699  
R-NT2RP2005344//Homo sapiens GDP-L-fucose pyrophosphorylase (GFPP) mRNA, complete cds//0.011:463:58//Hs.150926:AF017445  
R-NT2RP2005354//ESTs//7.2e-22:148:91//Hs.153783:H14544

R-NT2RP2005360//ESTs//0.048:225:60//Hs.7602:AA099247  
R-NT2RP2005393//Homo sapiens mRNA for KIAA0761 protein, partial cds//2.9  
e-41:248:82//Hs.93121:AB018304  
R-NT2RP2005407//ESTs, Weakly similar to OSH1 PROTEIN [Saccharomyces cere  
visiae]//2.5e-75:461:88//Hs.70849:AA121697  
R-NT2RP2005436//ESTs, Weakly similar to HYPOTHETICAL 37.0 KD PROTEIN B04  
95.8 IN CHROMOSOME II [C.elegans]//8.1e-96:491:95//Hs.7194:AI185631  
R-NT2RP2005441//ESTs//1.1e-110:548:96//Hs.5209:AA780068  
R-NT2RP2005453//ESTs//0.94:352:58//Hs.25870:H14423  
R-NT2RP2005457//ESTs//2.1e-46:236:97//Hs.19522:AA975096  
R-NT2RP2005464//ESTs//1.8e-72:349:99//Hs.44045:N51307  
R-NT2RP2005465//ESTs//0.0058:322:58//Hs.127009:AI378936  
R-NT2RP2005472//ESTs//0.47:309:60//Hs.144838:AI222019  
R-NT2RP2005476//ESTs//5.1e-40:205:98//Hs.101577:AI168526  
R-NT2RP2005490//ESTs//1.3e-70:364:96//Hs.134382:AA083573  
R-NT2RP2005491//EST//0.012:220:60//Hs.144448:AA812455  
R-NT2RP2005495//ESTs//1.2e-86:501:91//Hs.99445:R93540  
R-NT2RP2005496//ESTs//3.2e-34:263:81//Hs.70279:AA757426  
R-NT2RP2005498//ESTs, Highly similar to PROTEIN PHOSPHATASE PP2A, 55 KD  
REGULATORY SUBUNIT, NEURONAL ISOFORM [Oryctolagus cuniculus]//2.3e-45:2  
84:88//Hs.85752:AI138993  
R-NT2RP2005501//ESTs//2.5e-84:404:98//Hs.143812:AI141755  
R-NT2RP2005509//ESTs, Highly similar to HYPOTHETICAL 37.2 KD PROTEIN C1  
2C2.09C IN CHROMOSOME I [Schizosaccharomyces pombe]//8.2e-36:215:92//Hs.  
5298:AA725071  
R-NT2RP2005520//Homo sapiens chromosome-associated protein-E (hCAP-E) mR  
NA, complete cds//3.2e-110:570:94//Hs.119023:AF092563  
R-NT2RP2005525//ESTs, Weakly similar to !!!! ALU SUBFAMILY SQ WARNING EN  
TRY !!!! [H.sapiens]//1.3e-84:433:95//Hs.36942:AA524535

R-NT2RP2005531//EST//0.98:64:70//Hs.146573:AI139856  
R-NT2RP2005539//Homo sapiens mRNA for NS1-binding protein (NS1-BP)//8.8e-108:560:94//Hs.159597:AJ012449  
R-NT2RP2005540//Homo sapiens mRNA for KIAA0494 protein, complete cds//1.7e-115:583:96//Hs.62515:AB007963  
R-NT2RP2005549//EST//0.61:111:62//Hs.147482:AI215572  
R-NT2RP2005555//ESTs//6.6e-108:507:99//Hs.68613:AI357567  
R-NT2RP2005557//ESTs//3.1e-105:495:99//Hs.105985:AA885169  
R-NT2RP2005581//ESTs//1.7e-79:445:92//Hs.138152:H03240  
R-NT2RP2005600//ESTs//1.3e-38:192:100//Hs.48329:W92733  
R-NT2RP2005605//ESTs//7.6e-87:409:99//Hs.45005:AA975060  
R-NT2RP2005620//ESTs//2.9e-96:463:97//Hs.7407:AI376788  
R-NT2RP2005622//ESTs//1.8e-104:497:98//Hs.22595:AA394229  
R-NT2RP2005637//EST//2.5e-20:163:71//Hs.161164:AI418211  
R-NT2RP2005640//ESTs//5.0e-99:473:98//Hs.23467:AA708740  
R-NT2RP2005645//ESTs//9.5e-23:231:77//Hs.5534:AA195173  
R-NT2RP2005651//ESTs, Highly similar to XFIN PROTEIN [Xenopus laevis]//2.9e-103:525:96//Hs.70589:AA868470  
R-NT2RP2005654//Insulin-like growth factor binding protein 2//0.94:223:60//Hs.162:X16302  
R-NT2RP2005669//Homo sapiens nitrilase 1 (NIT1) mRNA, complete cds//2.7e-14:87:100//Hs.146406:AF069987  
R-NT2RP2005675//Homo sapiens growth suppressor related (DOC-1R) mRNA, complete cds//5.8e-91:434:98//Hs.25664:AF089814  
R-NT2RP2005683//ESTs//1.5e-98:494:96//Hs.22595:AA394229  
R-NT2RP2005690//ESTs//4.8e-43:286:86//Hs.150727:AI292236  
R-NT2RP2005694//EST//3.1e-82:386:100//Hs.149391:AI273643  
R-NT2RP2005701//ESTs, Highly similar to BUTYROPHILIN PRECURSOR [Bos taurus]//2.8e-68:376:93//Hs.9095:AA532630



R-NT2RP2005712//Homo sapiens mRNA for KIAA0799 protein, partial cds//1.3e-105:503:98//Hs.61638:AB018342

R-NT2RP2005719//ESTs, Weakly similar to GPI-anchored protein p137 precursor [H.sapiens] //5.4e-105:500:98//Hs.14298:AI417523

R-NT2RP2005722//EST//6.5e-76:395:94//Hs.142150:AA223982

R-NT2RP2005723//ESTs//1.5e-84:452:93//Hs.91753:R44455

R-NT2RP2005726//ESTs//3.5e-64:500:82//Hs.100526:AI223153

R-NT2RP2005741//ESTs//4.7e-60:333:93//Hs.107242:R40258

R-NT2RP2005748//ESTs//3.4e-102:498:97//Hs.82660:N78064

R-NT2RP2005752//Homo sapiens TNFR-related death receptor-6 (DR6) mRNA, complete cds//4.3e-42:223:96//Hs.159651:AF068868

R-NT2RP2005753//Homo sapiens I-1 receptor candidate protein mRNA, complete cds//1.2e-104:494:98//Hs.26285:AF082516

R-NT2RP2005763//ESTs//1.1e-97:456:99//Hs.65412:AI362163

R-NT2RP2005767//ESTs//8.0e-38:204:96//Hs.18460:AA193463

R-NT2RP2005773//ESTs, Highly similar to PYRROLINE-5-CARBOXYLATE REDUCTASE [Homo sapiens] //5.4e-112:559:96//Hs.14214:AI189379

R-NT2RP2005775//ESTs, Highly similar to NEUROLYSIN PRECURSOR [Sus scrofa] //3.0e-108:544:96//Hs.22151:AI214321

R-NT2RP2005781//ESTs//1.7e-43:217:99//Hs.144391:AA365664

R-NT2RP2005784//EST//0.0071:217:60//Hs.117332:AA699724

R-NT2RP2005804//ESTs//8.8e-107:512:98//Hs.15496:W44398

R-NT2RP2005812//ESTs//9.0e-76:359:99//Hs.113937:AI298746

R-NT2RP2005815//ESTs//5.5e-76:363:99//Hs.136230:AA594981

R-NT2RP2005835//ESTs//1.5e-100:541:94//Hs.86813:N25122

R-NT2RP2005841//ESTs//2.8e-105:556:92//Hs.69993:AA628403

R-NT2RP2005853//EST//2.0e-13:219:70//Hs.134016:AI076062

R-NT2RP2005857//ESTs//1.0e-115:576:96//Hs.30663:AI338462

R-NT2RP2005859//ESTs//7.3e-116:571:97//Hs.85986:AA195105

R-NT2RP2005868//EST//0.00023:320:61//Hs.149689:AI284133  
R-NT2RP2005890//ESTs//1.0e-96:466:98//Hs.122579:AA766315  
R-NT2RP2005901//ESTs//8.3e-116:548:98//Hs.66296:AI125268  
R-NT2RP2005908//ESTs, Weakly similar to weakly similar to gastrula zinc  
finger protein [C.elegans]//2.4e-73:397:94//Hs.16667:T92427  
R-NT2RP2005933//ESTs, Highly similar to nucleoporin p54 [R.norvegicus]//  
2.8e-114:560:97//Hs.9082:AA873170  
R-NT2RP2005942//ESTs//5.6e-117:582:96//Hs.146123:AI338419  
R-NT2RP2005980//ESTs//6.9e-101:478:98//Hs.43145:AA776988  
R-NT2RP2006023//Homo sapiens PYRIN (MEFV) mRNA, complete cds//8.5e-51:39  
8:80//Hs.113283:AF018080  
R-NT2RP2006038//ESTs//0.025:284:59//Hs.97852:AA404347  
R-NT2RP2006043//ESTs, Weakly similar to HYPOTHETICAL 37.0 KD PROTEIN B04  
95.8 IN CHROMOSOME II [C.elegans]//1.2e-50:278:94//Hs.7194:AI185631  
R-NT2RP2006052//ESTs//5.0e-52:272:95//Hs.99545:AA461492  
R-NT2RP2006069//ESTs//1.8e-90:495:93//Hs.43654:AA522714  
R-NT2RP2006071//ESTs//1.5e-38:218:94//Hs.107882:W72093  
R-NT2RP2006098//ESTs//2.9e-105:540:95//Hs.26860:N56918  
R-NT2RP2006100//Human organic anion transporting polypeptide (OATP) mRNA  
, complete cds//0.031:254:62//Hs.46440:U21943  
R-NT2RP2006103//ESTs//1.5e-86:416:98//Hs.152114:AA401365  
R-NT2RP2006141//ESTs//5.3e-88:432:98//Hs.77480:AA100522  
R-NT2RP2006166//Homo sapiens LIM protein mRNA, complete cds//2.8e-17:255  
:72//Hs.154103:AF061258  
R-NT2RP2006184//ESTs//8.4e-101:487:98//Hs.58009:W69435  
R-NT2RP2006186//Homo sapiens mRNA for KIAA0654 protein, partial cds//6.1  
e-110:553:95//Hs.109299:AB014554  
R-NT2RP2006196//Human clone 23960 mRNA sequence//0.0037:48:100//Hs.15129  
3:U79276

R-NT2RP2006200//ESTs//6.5e-77:398:96//Hs.163953:R01398  
R-NT2RP2006219//H.sapiens mRNA for DGCR6 protein//1.2e-94:532:90//Hs.153  
910:X96484  
R-NT2RP2006237//ESTs//1.2e-57:305:95//Hs.86149:AI341312  
R-NT2RP2006238//ESTs, Highly similar to ra8 [R.norvegicus]//1.5e-29:183:  
91//Hs.4048:AA404253  
R-NT2RP2006258//ESTs//3.2e-87:462:94//Hs.141556:N49928  
R-NT2RP2006261//ESTs//3.4e-57:326:92//Hs.22523:W02999  
R-NT2RP2006312//Homo sapiens BAF57 (BAF57) gene, complete cds//4.7e-96:4  
81:97//Hs.3404:AF035262  
R-NT2RP2006320//EST//3.4e-21:335:65//Hs.141603:N66015  
R-NT2RP2006321//ESTs, Moderately similar to karyopherin beta 3 [H.sapien  
s]//1.9e-89:460:96//Hs.21889:N78664  
R-NT2RP2006323//ESTs//3.5e-91:439:98//Hs.61697:AI081771  
R-NT2RP2006333//ESTs//4.9e-38:301:82//Hs.155999:AA196412  
R-NT2RP2006334//EST//3.1e-45:264:91//Hs.149599:AI282321  
R-NT2RP2006365//ESTs//2.9e-81:417:95//Hs.11814:W44411  
R-NT2RP2006393//Cytochrome P450, subfamily I (aromatic compound-inducibl  
e), polypeptide 2//3.9e-48:403:77//Hs.1361:M55053  
R-NT2RP2006436//Homo sapiens mRNA for small GTP-binding protein, complet  
e cds//1.4e-27:155:76//Hs.115325:D84488  
R-NT2RP2006441//ESTs//6.0e-108:529:97//Hs.101282:N45092  
R-NT2RP2006454//ESTs//9.2e-20:110:99//Hs.144687:AI341146  
R-NT2RP2006456//ESTs//7.1e-91:508:92//Hs.12488:W63595  
R-NT2RP2006464//Homo sapiens mRNA for AND-1 protein//2.1e-109:524:97//Hs  
.72160:AJ006266  
R-NT2RP2006467//EST//0.99:140:61//Hs.146958:AI174478  
R-NT2RP2006472//ESTs//3.3e-92:473:95//Hs.29216:AA916679  
R-NT2RP2006534//ESTs//1.2e-83:394:99//Hs.162116:AA524947

R-NT2RP2006554//ESTs//1.0e-87:460:95//Hs.47095:AA181474  
 R-NT2RP2006565//ESTs//3.2e-24:129:100//Hs.13499:AI299886  
 R-NT2RP2006571//ESTs//2.6e-56:306:94//Hs.98370:AA316622  
 R-NT2RP2006573//ESTs//2.0e-112:533:98//Hs.18685:AI393829  
 R-NT2RP2006598//ESTs, Weakly similar to retinoid X receptor interacting protein [M.musculus]//4.1e-109:542:97//Hs.7889:AI337112  
 R-NT2RP3000002//ESTs//1.3e-08:399:59//Hs.126044:AI301598  
 R-NT2RP3000031//Homo sapiens mRNA for histone deacetylase-like protein (JM21)//1.9e-116:560:97//Hs.6764:AJ011972  
 R-NT2RP3000046//Small inducible cytokine A5 (RANTES)//1.9e-57:312:85//Hs.155464:AF088219  
 R-NT2RP3000047//EST//0.91:130:66//Hs.140208:AA702213  
 R-NT2RP3000050//ESTs, Weakly similar to putative p150 [H.sapiens]//3.1e-41:249:90//Hs.156155:AI222202  
 R-NT2RP3000055//EST//2.4e-19:146:86//Hs.160497:AI255095  
 R-NT2RP3000072//ESTs//2.2e-82:424:96//Hs.21542:N49574  
 R-NT2RP3000080//ESTs//2.1e-29:186:89//Hs.153372:AA424029  
 R-NT2RP3000085//ESTs//4.5e-101:482:98//Hs.47649:AA838715  
 R-NT2RP3000109//ESTs//9.5e-97:455:99//Hs.17731:AI342241  
 R-NT2RP3000134//EST//4.7e-106:497:99//Hs.125531:AA884000  
 R-NT2RP3000142//Homo sapiens mRNA for KIAA0592 protein, partial cds//1.2e-116:578:96//Hs.13273:AB011164  
 R-NT2RP3000149//ESTs//7.7e-62:361:90//Hs.6649:N93418  
 R-NT2RP3000186  
 R-NT2RP3000197//ESTs//1.5e-75:436:91//Hs.140931:R51882  
 R-NT2RP3000207//ESTs//1.3e-98:468:98//Hs.126908:AA933091  
 R-NT2RP3000220//ESTs//2.2e-27:144:99//Hs.106861:R61306  
 R-NT2RP3000233//EST//7.8e-77:368:99//Hs.49075:N64817  
 R-NT2RP3000235//ESTs//0.43:82:74//Hs.132828:AI032819

R-NT2RP3000247//EST//2.2e-97:459:99//Hs.127928:AA969239  
 R-NT2RP3000251  
 R-NT2RP3000252//ESTs, Weakly similar to Lpg15p [S.cerevisiae]//2.0e-108:  
 532:97//Hs.111086:AI379177  
 R-NT2RP3000255//EST//0.67:93:67//Hs.120579:AA743073  
 R-NT2RP3000267//ESTs//8.5e-108:542:95//Hs.24984:AA534446  
 R-NT2RP3000299//ESTs, Weakly similar to enhancer of filamentation 1 [H.sa  
 piens]//3.6e-103:516:96//Hs.4894:AI191323  
 R-NT2RP3000312//ESTs//1.3e-100:493:97//Hs.29379:AI094117  
 R-NT2RP3000320//ESTs//3.2e-95:538:91//Hs.118793:AA192438  
 R-NT2RP3000324  
 R-NT2RP3000333//ESTs//6.0e-39:194:100//Hs.119238:AA476267  
 R-NT2RP3000341//ESTs//0.51:251:61//Hs.94090:AA777689  
 R-NT2RP3000348//EST//1.8e-80:389:98//Hs.145944:AI276225  
 R-NT2RP3000350//ESTs, Weakly similar to Lpg15p [S.cerevisiae]//3.1e-110:  
 556:96//Hs.111086:AI379177  
 R-NT2RP3000359//EST//4.9e-61:340:92//Hs.126495:AA913741  
 R-NT2RP3000361//ESTs, Weakly similar to PRE-MRNA SPLICING FACTOR PRP6 [S  
 .cerevisiae]//4.8e-91:439:97//Hs.31334:AI144423  
 R-NT2RP3000366//EST//0.20:392:57//Hs.149652:AI283303  
 R-NT2RP3000397//EST//8.7e-26:150:94//Hs.124617:AA855106  
 R-NT2RP3000403//Homo sapiens formin binding protein 21 mRNA, complete cd.  
 s//4.2e-111:529:98//Hs.28307:AF071185  
 R-NT2RP3000418//EST//3.3e-09:202:67//Hs.117189:AA682947  
 R-NT2RP3000433  
 R-NT2RP3000439//ESTs//3.1e-79:426:92//Hs.26548:W26340  
 R-NT2RP3000441//ESTs//6.3e-84:420:97//Hs.137482:AA421254  
 R-NT2RP3000449//ESTs//4.9e-93:435:99//Hs.54617:AI379102  
 R-NT2RP3000451//ESTs//2.3e-89:439:97//Hs.9196:AA748492

R-NT2RP3000456//Homo Sapiens (clone B3B3E13) chromosome 4p16.3 DNA fragment//1.8e-23:347:70//Hs.114963:L34408

R-NT2RP3000484//Heparin cofactor II//0.98:166:62//Hs.1478:M58600

R-NT2RP3000487//ESTs//0.012:384:60//Hs.88684:AA885141

R-NT2RP3000512//Homeo box B3//2.0e-69:377:93//Hs.49931:X16667

R-NT2RP3000526//ESTs//1.6e-91:432:99//Hs.38042:AA187151

R-NT2RP3000527//ESTs//1.2e-100:518:94//Hs.104557:AI078161

R-NT2RP3000531//ESTs, Weakly similar to TH1 protein [D.melanogaster]//0.95:85:71//Hs.5184:AA709151

R-NT2RP3000542//ESTs//2.6e-53:375:84//Hs.44158:N30180

R-NT2RP3000561//EST//1.1e-13:170:75//Hs.148421:AI198036

R-NT2RP3000562//Human mRNA for KIAA0233 gene, complete cds//0.97:141:68//Hs.79077:D87071

R-NT2RP3000578//ESTs//2.6e-68:324:100//Hs.5445:AA779447

R-NT2RP3000582//ESTs//2.1e-25:131:80//Hs.152465:AA563785

R-NT2RP3000584//ESTs//1.8e-97:460:99//Hs.120698:AI241511

R-NT2RP3000590//ESTs//2.0e-97:453:100//Hs.105355:AA953817

R-NT2RP3000592//ESTs//2.8e-91:432:99//Hs.144304:AI190916

R-NT2RP3000596//Human mRNA for KIAA0314 gene, partial cds//1.5e-09:447:58//Hs.155045:AB002312

R-NT2RP3000599//ESTs//3.8e-93:437:99//Hs.23971:AA829880

R-NT2RP3000605//ESTs//4.2e-111:554:96//Hs.40780:AA422049

R-NT2RP3000622//ESTs//2.0e-100:473:99//Hs.11387:AI127394

R-NT2RP3000624//ESTs, Weakly similar to KIAA0256 [H.sapiens]//5.4e-115:545:98//Hs.4857:AI090739

R-NT2RP3000628//Homo sapiens mRNA for KIAA0772 protein, complete cds//4.3e-49:397:80//Hs.15519:AB018315

R-NT2RP3000632//ESTs, Moderately similar to cyclin-selective ubiquitin carrier protein [H.sapiens]//6.3e-92:434:99//Hs.152517:AA719022

R-NT2RP3000644//ESTs//1.0e-44:306:84//Hs.155498:W27084  
 R-NT2RP3000661//ESTs//3.1e-95:470:97//Hs.126069:W76185  
 R-NT2RP3000665//ESTs//3.3e-95:503:94//Hs.34313:W81185  
 R-NT2RP3000685//ESTs//2.7e-99:515:94//Hs.9711:R60873  
 R-NT2RP3000690//ESTs//3.3e-88:414:99//Hs.146589:AI085578  
 R-NT2RP3000736  
 R-NT2RP3000742//ESTs, Highly similar to 1-PHOSPHATIDYLINOSITOL-4,5-BISP  
 HOSPHATE PHOSPHODIESTERASE DELTA 1 [Rattus norvegicus]//1.8e-07:114:75//  
 Hs.136065:W21960  
 R-NT2RP3000753//ESTs//3.1e-99:461:100//Hs.150901:AI310447  
 R-NT2RP3000759//ESTs//2.0e-74:384:95//Hs.104222:AA207243  
 R-NT2RP3000815//ESTs//8.5e-97:455:99//Hs.158897:AI378583  
 R-NT2RP3000825//EST//0.0089:343:59//Hs.42897:N20810  
 R-NT2RP3000826//EST//3.4e-33:342:74//Hs.162236:AA551582  
 R-NT2RP3000836//ESTs//6.8e-24:181:84//Hs.134464:AI151081  
 R-NT2RP3000841//ESTs//4.5e-93:491:93//Hs.23618:H98082  
 R-NT2RP3000845//ESTs//2.4e-88:473:93//Hs.8312:AA813022  
 R-NT2RP3000847//ESTs//9.3e-89:460:95//Hs.154106:AI051657  
 R-NT2RP3000850  
 R-NT2RP3000852//Fibrillin 2//0.55:237:63//Hs.79432:U03272  
 R-NT2RP3000859//ESTs//1.4e-96:509:94//Hs.7187:AA576895  
 R-NT2RP3000865//EST//4.8e-23:461:66//Hs.162088:AA505741  
 R-NT2RP3000868//ESTs//5.4e-78:430:93//Hs.102796:N70837  
 R-NT2RP3000869//ESTs//8.5e-77:397:94//Hs.84484:AI014673  
 R-NT2RP3000875//Mevalonate kinase//3.8e-78:531:84//Hs.75138:M88468  
 R-NT2RP3000901//ESTs//2.1e-95:466:97//Hs.10647:AA428217  
 R-NT2RP3000904//ESTs//1.6e-79:380:99//Hs.100850:AA479385  
 R-NT2RP3000917//ESTs, Highly similar to mouse Dhml protein [M.musculus] /  
 /9.5e-113:566:96//Hs.5900:AA035728

R-NT2RP3000919

R-NT2RP3000968//40S RIBOSOMAL PROTEIN S15A//1.5e-25:375:71//Hs.2953:X844  
07

R-NT2RP3000980//ESTs//3.3e-72:364:96//Hs.9536:AA114178

R-NT2RP3000994//ESTs//3.5e-111:537:97//Hs.21146:AA683542

R-NT2RP3001004//ESTs//9.6e-91:456:96//Hs.58974:W87405

R-NT2RP3001007//ESTs//6.7e-99:482:97//Hs.117737:AI088029

R-NT2RP3001055//ESTs//0.0012:294:60//Hs.66479:AA863044

R-NT2RP3001057//ESTs, Highly similar to ZINC FINGER PROTEIN HF.12 [Homo  
sapiens] //5.6e-102:486:99//Hs.145956:AA007349

R-NT2RP3001081//Retinal pigment epithelium-specific protein (65kD)//0.00  
12:447:58//Hs.2133:U18991

R-NT2RP3001084//ESTs//4.3e-102:528:96//Hs.25277:W87874

R-NT2RP3001096//ESTs//1.1e-110:540:96//Hs.42824:AA873182

R-NT2RP3001107//ESTs//7.6e-100:478:98//Hs.99669:AA287832

R-NT2RP3001109//DNA polymerase gamma//0.0014:50:100//Hs.80961:U60325

R-NT2RP3001111//ESTs, Weakly similar to Trf-proximal protein [D.melanoga  
ster] //3.2e-104:543:95//Hs.93796:C06063

R-NT2RP3001113//ESTs//3.3e-100:467:99//Hs.97757:AA401575

R-NT2RP3001115//Oxytocin receptor//7.9e-30:505:67//Hs.2820:X64878

R-NT2RP3001116//ESTs//4.6e-41:229:96//Hs.58412:W74779

R-NT2RP3001119//ESTs//6.9e-88:478:92//Hs.19469:AA203180

R-NT2RP3001120//ESTs//3.1e-82:430:93//Hs.110956:AI190166

R-NT2RP3001126//ESTs//4.4e-52:264:96//Hs.25264:R78188

R-NT2RP3001133//ESTs//4.7e-105:541:94//Hs.73239:AA573761

R-NT2RP3001140//Homo sapiens mRNA for KIAA0762 protein, partial cds//2.6  
e-115:549:97//Hs.5378:AB018305

R-NT2RP3001147//ESTs, Highly similar to GTPASE ACTIVATING PROTEIN ROTUN  
D [Drosophila melanogaster] //9.6e-113:552:97//Hs.23900:U82984



R-NT2RP3001150//ESTs//2.9e-90:444:97//Hs.99601:AA760717  
R-NT2RP3001155//Homo sapiens mRNA for AND-1 protein//9.4e-118:563:98//Hs  
.72160:AJ006266  
R-NT2RP3001176//ESTs//1.8e-110:534:98//Hs.58650:AI074460  
R-NT2RP3001214//ESTs//1.7e-109:545:96//Hs.24481:AA573139  
R-NT2RP3001216//EST//0.00098:128:66//Hs.160493:AI254963  
R-NT2RP3001221//EST//0.010:106:66//Hs.147774:AI221196  
R-NT2RP3001232//ESTs//1.5e-101:518:94//Hs.21630:AA778399  
R-NT2RP3001236//ESTs, Highly similar to KIAA0377 [H.sapiens]//2.8e-89:46  
2:95//Hs.116793:AA779588  
R-NT2RP3001239//ESTs, Moderately similar to NEURAXIN [Rattus norvegicus  
]//5.2e-82:466:91//Hs.66048:AA524416  
R-NT2RP3001245//EST//0.53:237:62//Hs.161131:AI417631  
R-NT2RP3001253//ESTs//1.7e-105:535:96//Hs.42315:AI222997  
R-NT2RP3001260//EST//0.16:144:62//Hs.126856:AA932135  
R-NT2RP3001268//Human Aac11 (aac11) mRNA, complete cds//0.12:494:59//Hs.  
151031:U83857  
R-NT2RP3001272//ESTs//1.4e-92:436:99//Hs.149831:AI383965  
R-NT2RP3001274//ESTs//3.9e-81:424:95//Hs.113184:N25651  
R-NT2RP3001281//EST//3.1e-60:298:98//Hs.149230:AI247332  
R-NT2RP3001307//EST//0.42:215:62//Hs.126165:AA868691  
R-NT2RP3001318//ESTs//4.1e-74:363:97//Hs.130832:H92571  
R-NT2RP3001325//ESTs//1.7e-106:534:96//Hs.21214:H98989  
R-NT2RP3001338//Human protein tyrosine phosphatase sigma mRNA, complete  
cds//0.22:199:63//Hs.159534:U35234  
R-NT2RP3001339//Homo sapiens mRNA for KIAA0451 protein, complete cds//3.  
9e-114:566:96//Hs.18586:AB007920  
R-NT2RP3001340//ESTs//1.1e-72:411:92//Hs.21135:W81653  
R-NT2RP3001355//ESTs//9.0e-103:521:95//Hs.99486:AA776798

R-NT2RP3001374//ESTs//2.7e-82:395:98//Hs.117102:AA993090  
 R-NT2RP3001383//ESTs//3.6e-10:118:78//Hs.111055:AA169778  
 R-NT2RP3001384//ESTs, Weakly similar to A-kinase anchor protein 95, AKAP  
 95 [R.norvegicus] //5.7e-92:522:90//Hs.96200:AA218942  
 R-NT2RP3001392//ESTs//5.9e-62:296:100//Hs.125034:AA907375  
 R-NT2RP3001396//ESTs//3.7e-111:528:98//Hs.22612:AA152232  
 R-NT2RP3001398//ESTs//2.6e-94:449:99//Hs.146332:AI276628  
 R-NT2RP3001399//ESTs//2.6e-82:401:97//Hs.7932:AI041186  
 R-NT2RP3001407//ESTs//2.2e-101:488:97//Hs.71573:AA496898  
 R-NT2RP3001420//EST//7.4e-44:394:79//Hs.137041:AA877817  
 R-NT2RP3001426//Homo sapiens clone 24616 mRNA sequence//3.6e-106:550:94/  
 /Hs.6957:AF052158  
 R-NT2RP3001427//ESTs//1.3e-87:374:97//Hs.5457:H05692  
 R-NT2RP3001428//Neurotrophic tyrosine kinase, receptor, type 1//4.7e-96:  
 533:91//Hs.85844:X66397  
 R-NT2RP3001432//ESTs//1.9e-102:523:95//Hs.132978:AI041374  
 R-NT2RP3001447//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING  
 ENTRY !!!! [H.sapiens] //5.1e-101:482:98//Hs.124135:AA910560  
 R-NT2RP3001449//ESTs//2.2e-99:502:96//Hs.7834:N45994  
 R-NT2RP3001453//Small inducible cytokine A5 (RANTES)//8.1e-45:295:85//Hs  
 .155464:AF088219  
 R-NT2RP3001457//ESTs//1.5e-52:256:99//Hs.117982:AA644658  
 R-NT2RP3001459//ESTs//3.4e-62:299:99//Hs.146098:AA167280  
 R-NT2RP3001472//ESTs//4.8e-108:540:96//Hs.69594:N37009  
 R-NT2RP3001490//ESTs//3.5e-91:549:88//Hs.6606:AA211783  
 R-NT2RP3001495//Human oxidoreductase (HHCMA56) mRNA, complete cds//1.4e-  
 61:338:93//Hs.519:U13395  
 R-NT2RP3001497//Homo sapiens multiple membrane spanning receptor TRC8 (T  
 RC8) mRNA, complete cds//6.8e-112:549:97//Hs.28285:AF064801

R-NT2RP3001527//ESTs//4.4e-105:543:95//Hs.158761:AA631047  
 R-NT2RP3001529//Homo sapiens tapasin (NGS-17) mRNA, complete cds//7.9e-5  
 9:427:83//Hs.5247:AF029750  
 R-NT2RP3001538//ESTs//1.6e-94:521:92//Hs.6846:AA209463  
 R-NT2RP3001554//ESTs, Moderately similar to NEURAXIN [Rattus norvegicus  
 ]//2.8e-76:392:95//Hs.66048:AA524416  
 R-NT2RP3001580//ESTs//3.7e-82:398:98//Hs.23490:N49477  
 R-NT2RP3001587//Homa sapiens mRNA for HRIHFB2115, partial cds//1.8e-09:8  
 6:88//Hs.4311:AB015337  
 R-NT2RP3001589//ESTs//0.0029:243:62//Hs.158924:AA605194  
 R-NT2RP3001607//EST//0.00096:76:78//Hs.140319:AA748328  
 R-NT2RP3001608//ESTs//3.8e-105:525:96//Hs.144655:AI279798  
 R-NT2RP3001621//ESTs//3.3e-108:535:97//Hs.47378:AI193598  
 R-NT2RP3001629  
 R-NT2RP3001634//Homo sapiens TRIAD1 type I mRNA, complete cds//2.7e-109:  
 541:96//Hs.9899:AF099149  
 R-NT2RP3001642//ESTs//6.0e-105:525:96//Hs.3376:AA915989  
 R-NT2RP3001646//ESTs//4.8e-95:523:92//Hs.64036:AA127709  
 R-NT2RP3001671//ESTs//0.0013:367:60//Hs.106090:AA457030  
 R-NT2RP3001672//ESTs//3.4e-37:191:98//Hs.57475:AI382189  
 R-NT2RP3001676//ESTs//1.5e-81:408:97//Hs.142547:N67648  
 R-NT2RP3001678//ESTs//4.3e-85:405:99//Hs.121915:AI268225  
 R-NT2RP3001679//ESTs//3.4e-100:545:93//Hs.5943:AI222558  
 R-NT2RP3001688//Human mRNA for KIAA0392 gene, partial cds//8.6e-46:301:8  
 7//Hs.40100:AB002390  
 R-NT2RP3001690//ESTs//3.3e-111:542:97//Hs.86149:AI341312  
 R-NT2RP3001708//ESTs//1.4e-96:349:95//Hs.17975:AA868618  
 R-NT2RP3001712//ESTs//9.3e-14:102:92//Hs.78041:N29669  
 R-NT2RP3001716//ESTs, Highly similar to BONE MORPHOGENETIC PROTEIN 1 PR

ECURSOR [Mus musculus] //4.1e-80:444:91//Hs.6823:W18181  
R-NT2RP3001724//ESTs//1.8e-109:547:96//Hs.14570:AI422099  
R-NT2RP3001730//ESTs//4.1e-98:528:92//Hs.155115:AA669923  
R-NT2RP3001739//ESTs//4.4e-87:444:94//Hs.27239:W27810  
R-NT2RP3001752//ESTs//6.1e-93:490:94//Hs.4210:AA740440  
R-NT2RP3001753//ESTs//2.5e-82:395:99//Hs.126435:AA912968  
R-NT2RP3001764//ESTs, Weakly similar to protein-tyrosine phosphatase [H. sapiens] //1.2e-87:450:96//Hs.20281:N92517  
R-NT2RP3001777//ESTs//1.1e-86:360:97//Hs.100530:H06725  
R-NT2RP3001782//Homo sapiens mRNA for KIAA0459 protein, partial cds//4.2 e-113:549:97//Hs.28169:AB007928  
R-NT2RP3001792//ESTs, Weakly similar to F35C12.2 [C.elegans] //1.1e-21:11 9:99//Hs.44268:AA455900  
R-NT2RP3001799//OX40L RECEPTOR PRECURSOR//2.8e-45:374:79//Hs.129780:X759 62  
R-NT2RP3001819//ESTs//2.6e-87:432:96//Hs.10414:AI291292  
R-NT2RP3001844//ESTs//0.024:128:67//Hs.25131:N50117  
R-NT2RP3001854//ESTs//1.4e-92:490:92//Hs.15165:N52900  
R-NT2RP3001855//ESTs//1.9e-66:361:93//Hs.10043:D81792  
R-NT2RP3001896//ESTs//1.4e-96:343:97//Hs.24809:N73642  
R-NT2RP3001898//ESTs//4.1e-90:515:91//Hs.4867:AA521180  
R-NT2RP3001915//ESTs//4.4e-32:175:95//Hs.24641:AA954666  
R-NT2RP3001926//ESTs, Highly similar to NUCLEOLYSIN TIA-1 [Homo sapiens] //1.0e-40:202:100//Hs.24709:AI123300  
R-NT2RP3001929//ESTs//6.6e-84:449:94//Hs.26962:AA682781  
R-NT2RP3001931//ESTs//1.0e-41:214:99//Hs.32360:AA534737  
R-NT2RP3001938//ESTs, Highly similar to SPORULATION-SPECIFIC PROTEIN 1 [Saccharomyces cerevisiae] //1.3e-95:483:96//Hs.5771:W74591  
R-NT2RP3001943//ESTs//1.2e-23:169:88//Hs.103930:AA160990

R-NT2RP3001944//ESTs//2.0e-90:439:97//Hs.103380:AI291325  
 R-NT2RP3001969//ESTs//0.95:133:65//Hs.131669:AI025889  
 R-NT2RP3001989//ESTs, Weakly similar to C01A2.4 [C.elegans]//8.9e-64:310  
 :99//Hs.11449:AI201540  
 R-NT2RP3002002//ESTs//2.1e-95:562:89//Hs.5997:AA897088  
 R-NT2RP3002004//H.sapiens mRNA for FAST kinase//1.6e-42:335:82//Hs.75087  
 :X86779  
 R-NT2RP3002007//ESTs//0.12:184:66//Hs.94030:AA846729  
 R-NT2RP3002014//Small inducible cytokine A5 (RANTES)//6.8e-47:291:89//Hs  
 .155464:AF088219  
 R-NT2RP3002033  
 R-NT2RP3002045//ESTs//1.0e-92:555:88//Hs.106411:W29081  
 R-NT2RP3002054//EST//0.45:155:63//Hs.5656:D20426  
 R-NT2RP3002056//ESTs//1.4e-95:504:93//Hs.17428:AI365221  
 R-NT2RP3002057//Human mRNA for KIAA0152 gene, complete cds//0.69:127:66/  
 /Hs.90438:D63486  
 R-NT2RP3002062  
 R-NT2RP3002063//ESTs//2.1e-113:552:97//Hs.9591:AA069657  
 R-NT2RP3002081//ESTs//5.5e-43:212:100//Hs.124852:AA969139  
 R-NT2RP3002097//EST//2.3e-10:80:91//Hs.102717:N59148  
 R-NT2RP3002102  
 R-NT2RP3002108  
 R-NT2RP3002146//ESTs//5.5e-58:296:97//Hs.65328:AA625385  
 R-NT2RP3002147//EST//2.5e-53:387:81//Hs.147928:AI249703  
 R-NT2RP3002151//ESTs, Highly similar to G1 TO S PHASE TRANSITION PROTEI  
 N 1 HOMOLOG [Homo sapiens]//6.2e-107:534:96//Hs.59523:AA602837  
 R-NT2RP3002163//ESTs//2.7e-106:520:97//Hs.21258:AA412293  
 R-NT2RP3002165//ESTs//7.4e-93:479:95//Hs.27299:AI074024  
 R-NT2RP3002166//ESTs//1.0:261:59//Hs.132817:AA593713

R-NT2RP3002173//ESTs//2.7e-93:512:92//Hs.23648:H07120  
 R-NT2RP3002181//ESTs//1.0e-84:435:96//Hs.47378:AI193598  
 R-NT2RP3002244//ESTs//2.7e-11:97:89//Hs.9412:W72446  
 R-NT2RP3002248//ESTs//4.3e-90:459:95//Hs.9848:AA130588  
 R-NT2RP3002255//ESTs//1.3e-45:289:88//Hs.9100:AA431672  
 R-NT2RP3002273//ESTs//2.3e-100:489:97//Hs.8258:AA744743  
 R-NT2RP3002276//ESTs//1.2e-50:306:91//Hs.16160:AA778171  
 R-NT2RP3002303//ESTs//1.1e-67:323:99//Hs.129761:AA836898  
 R-NT2RP3002304//ESTs//2.8e-86:405:99//Hs.29643:AA418500  
 R-NT2RP3002330//ESTs, Weakly similar to G1 TO S PHASE TRANSITION PROTEIN  
 1 HOMOLOG [H.sapiens]//1.8e-19:136:87//Hs.106928:AI041737  
 R-NT2RP3002343//ESTs//1.0e-42:260:93//Hs.7797:W25667  
 R-NT2RP3002351//Homo sapiens 9G8 splicing factor mRNA, complete cds//0.0  
 048:221:64//Hs.556:L41887  
 R-NT2RP3002352//Homo sapiens mRNA for protein encoded by cxorf5 (71-7A)  
 gene//5.8e-105:516:94//Hs.6483:Y16355  
 R-NT2RP3002455//Homo sapiens mRNA for KIAA0678 protein, partial cds//1.5  
 e-103:524:95//Hs.12707:AB014578  
 R-NT2RP3002484//Human APRT gene for adenine phosphoribosyltransferase//0  
 .54:108:71//Hs.28914:Y00486  
 R-NT2RP3002501//ESTs//2.7e-96:489:95//Hs.27335:N74185  
 R-NT2RP3002512//ESTs, Weakly similar to HYPOTHETICAL 31.0 KD PROTEIN R10  
 7.2 IN CHROMOSOME III [C.elegans]//3.2e-90:526:90//Hs.8083:AA521436  
 R-NT2RP3002529//ESTs, Highly similar to PUTATIVE VACUOLAR PROTEIN SORTI  
 NG-ASSOCIATED PROTEIN C2G11.03C [Schizosaccharomyces pombe]//3.8e-101:49  
 7:96//Hs.6650:AA843246  
 R-NT2RP3002545//Homo sapiens mRNA for KIAA0729 protein, partial cds//1.1  
 e-83:438:94//Hs.19542:AB018272  
 R-NT2RP3002549//ESTs//3.8e-98:493:96//Hs.7358:AA191673

R-NT2RP3002566//Homo sapiens calcium-activated potassium channel (KCNN3)  
mRNA, complete cds//0.14:184:63//Hs.89230:AF031815

R-NT2RP3002587//Homo sapiens KIAA0420 mRNA, complete cds//2.0e-18:138:78  
//Hs.129883:AB007880

R-NT2RP3002590//ESTs//2.9e-51:290:93//Hs.162942:AI243850

R-NT2RP3002602//Homo sapiens stannin mRNA, complete cds//5.5e-06:58:100/  
/Hs.76691:AF070673

R-NT2RP3002603

R-NT2RP3002631//ESTs//4.8e-54:367:85//Hs.13109:AA192514

R-NT2RP3002659//ESTs//5.3e-30:229:85//Hs.152114:AA401365

R-NT2RP3002660//ESTs//1.9e-88:452:95//Hs.120146:AA708573

R-NT2RP3002663//EST//3.2e-89:469:95//Hs.105767:AA525172

R-NT2RP3002671//ESTs, Highly similar to ELONGATION FACTOR 2 [Drosophila  
melanogaster]//5.9e-109:537:97//Hs.19348:AA151678

R-NT2RP3002682//ESTs//2.3e-98:541:91//Hs.75844:AA115502

R-NT2RP3002687//ESTs//5.5e-103:498:97//Hs.72782:AA910871

R-NT2RP3002688//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT  
RY !!!! [H.sapiens]//5.0e-101:524:95//Hs.32580:AI123601

R-NT2RP3002701//EST//0.87:131:63//Hs.161916:AA483169

R-NT2RP3002713//ESTs//4.7e-106:542:95//Hs.14479:AA160945

R-NT2RP3002763//ESTs//1.3e-54:290:94//Hs.142031:AA809159

R-NT2RP3002770//ESTs//0.047:275:61//Hs.122984:AA526973

R-NT2RP3002785//ESTs//2.4e-52:255:99//Hs.132959:AI376958

R-NT2RP3002799//EST//8.2e-61:321:94//Hs.140992:R71377

R-NT2RP3002810//EST//0.19:116:68//Hs.121810:AA775240

R-NT2RP3002818//ESTs//1.3e-109:531:98//Hs.58924:AI348080

R-NT2RP3002861//ESTs//2.5e-84:429:95//Hs.23920:AA909678

R-NT2RP3002869//EST//0.00011:116:71//Hs.161606:AA019641

R-NT2RP3002876//ESTs//0.0024:182:63//Hs.117306:AA687262

R-NT2RP3002877//Homo sapiens X-ray repair cross-complementing protein 2 (XRCC2) mRNA, complete cds//8.1e-14:146:72//Hs.129727:AF035587

R-NT2RP3002909//Homo sapiens mRNA for KIAA0771 protein, partial cds//1.5e-110:570:95//Hs.6162:AB018314

R-NT2RP3002911//ESTs//3.6e-92:436:99//Hs.143917:AI206286

R-NT2RP3002948//EST//1.0:102:65//Hs.144730:AI191975

R-NT2RP3002953//ESTs//1.8e-107:513:98//Hs.119693:AI201698

R-NT2RP3002955//Homo sapiens mRNA, chromosome 1 specific transcript KIAA0492//0.23:563:56//Hs.127338:AB007961

R-NT2RP3002969//ESTs, Weakly similar to LONG-CHAIN-FATTY-ACID--COA LIGASE 1 [Saccharomyces cerevisiae]//2.0e-56:387:86//Hs.144597:W20143

R-NT2RP3002972//ESTs//1.7e-97:502:96//Hs.7274:AA476850

R-NT2RP3002978//ESTs//8.6e-104:498:98//Hs.118923:AA252116

R-NT2RP3002988//EST//1.2e-59:315:94//Hs.157743:AI360553

R-NT2RP3003008//ESTs//1.4e-97:515:94//Hs.6544:AA524423

R-NT2RP3003032//ESTs, Weakly similar to RETROVIRUS-RELATED POLYPROTEIN [Mus musculus]//3.0e-100:528:94//Hs.90353:N98551

R-NT2RP3003059//ESTs//1.7e-76:398:95//Hs.102971:W05355

R-NT2RP3003061//ESTs//4.9e-82:414:96//Hs.99603:AI141912

R-NT2RP3003068//ESTs, Weakly similar to M18.3 [C.elegans]//5.9e-83:392:99//Hs.101364:AA534439

R-NT2RP3003071//ESTs//6.3e-85:399:99//Hs.109755:AA180809

R-NT2RP3003078//ESTs//1.0e-98:471:99//Hs.7995:AI359466

R-NT2RP3003101//EST//0.032:235:60//Hs.147920:AI202441

R-NT2RP3003121//ESTs//3.0e-47:238:97//Hs.43559:AI003520

R-NT2RP3003133//EST//1.5e-77:395:96//Hs.142150:AA223982

R-NT2RP3003138//ESTs, Highly similar to KINESIN-LIKE PROTEIN KIF4 [Mus musculus]//3.3e-107:535:96//Hs.27437:AA004208

R-NT2RP3003139//ESTs//2.5e-106:504:98//Hs.106795:AI271632



R-NT2RP3003150//ESTs//1.6e-99:539:91//Hs.46500:AA129774  
 R-NT2RP3003157//ESTs//1.5e-114:563:97//Hs.58608:AA081007  
 R-NT2RP3003185//ESTs//3.9e-93:443:98//Hs.9741:AI131226  
 R-NT2RP3003193//ESTs//2.0e-37:428:71//Hs.33354:AA179944  
 R-NT2RP3003197//ESTs//5.8e-56:312:94//Hs.7016:AA215796  
 R-NT2RP3003203//EST//0.0073:212:63//Hs.161355:AI422634  
 R-NT2RP3003204//ESTs//7.4e-52:253:99//Hs.120146:AA708573  
 R-NT2RP3003212//ESTs//1.8e-76:401:95//Hs.29067:N26107  
 R-NT2RP3003230//ESTs, Highly similar to CORONIN [Dictyostelium discoideum] //2.0e-40:229:93//Hs.17377:AI078151  
 R-NT2RP3003242//ESTs//8.3e-97:458:99//Hs.23057:AI290343  
 R-NT2RP3003251//ESTs//1.5e-60:320:95//Hs.36495:AA151628  
 R-NT2RP3003264//ESTs//2.1e-103:521:95//Hs.4094:AA173960  
 R-NT2RP3003278//ESTs//8.2e-109:536:96//Hs.23788:AA524061  
 R-NT2RP3003282//Homo sapiens dynamin (DNM) mRNA, complete cds//2.4e-102:550:93//Hs.11702:L36983  
 R-NT2RP3003290//EST//4.3e-27:372:70//Hs.159131:AI384035  
 R-NT2RP3003301//ESTs//4.4e-56:285:97//Hs.95370:AA601055  
 R-NT2RP3003302//EST//7.2e-10:395:63//Hs.162554:AA584818  
 R-NT2RP3003311//ESTs//4.2e-110:538:97//Hs.62180:AI341261  
 R-NT2RP3003313//ESTs//2.1e-106:531:96//Hs.22630:C05931  
 R-NT2RP3003327//ESTs//4.3e-102:518:95//Hs.120355:AA625445  
 R-NT2RP3003330//ESTs//8.6e-104:497:97//Hs.72071:AI125289  
 R-NT2RP3003344//ESTs//2.5e-105:494:99//Hs.112188:AA872993  
 R-NT2RP3003346//ESTs//1.0:123:69//Hs.116029:AA813102  
 R-NT2RP3003353//EST//0.0014:162:68//Hs.149191:AI246155  
 R-NT2RP3003377//EST//4.5e-15:119:85//Hs.148129:AA885567  
 R-NT2RP3003384//EST//0.0057:86:74//Hs.127735:AA962272  
 R-NT2RP3003385//ESTs//0.64:347:59//Hs.5646:W72721

R-NT2RP3003403//ESTs, Weakly similar to LINE-1 REVERSE TRANSCRIPTASE HOM  
OLOG [H.sapiens] //2.2e-24:418:67//Hs.139488:AI124095

R-NT2RP3003409//ESTs//5.3e-98:479:97//Hs.155198:AA767372

R-NT2RP3003411//ESTs//4.8e-86:416:97//Hs.129059:AA126041

R-NT2RP3003427//ESTs//7.4e-103:510:96//Hs.25303:AA641023

R-NT2RP3003433//ESTs//3.5e-85:405:99//Hs.63131:AA664156

R-NT2RP3003464//Homo sapiens rab3-GAP regulatory domain mRNA, complete c  
ds//3.6e-97:479:96//Hs.14934:AF004828

R-NT2RP3003490//Homo sapiens mRNA for KIAA0725 protein, partial cds//4.1  
e-102:527:93//Hs.26450:AB018268

R-NT2RP3003491//ESTs, Weakly similar to No definition line found [C.eleg  
ans] //4.0e-106:549:94//Hs.7886:AI057529

R-NT2RP3003500//Human RP3 mRNA, complete cds//0.66:401:60//Hs.75307:U025  
56

R-NT2RP3003543//Human clone A9A2BRB7 (CAC)n/(GTG)n repeat-containing mRN  
A//4.1e-33:217:88//Hs.8068:U00952

R-NT2RP3003552//ESTs//3.1e-106:546:94//Hs.101754:AI123430

R-NT2RP3003555//ESTs//3.4e-106:537:95//Hs.85550:AA187681

R-NT2RP3003564

R-NT2RP3003572//ESTs//1.2e-20:122:88//Hs.8253:N48721

R-NT2RP3003576//ESTs//2.7e-71:394:94//Hs.151136:R99944

R-NT2RP3003589//EST//0.58:242:59//Hs.130804:AA894759

R-NT2RP3003625//ESTs//7.6e-41:349:80//Hs.140608:N53448

R-NT2RP3003656//Human LIM protein (LPP) mRNA, partial cds//0.26:222:60//  
Hs.17217:U49957

R-NT2RP3003659//ESTs//2.0e-113:547:97//Hs.23389:AA769310

R-NT2RP3003665//ESTs//1.6e-80:415:95//Hs.141084:H11714

R-NT2RP3003672

R-NT2RP3003686//ESTs//6.8e-114:552:97//Hs.43299:N23036

R-NT2RP3003701//ESTs//2.1e-16:282:66//Hs.115512:AI208768  
 R-NT2RP3003716//ESTs//2.1e-45:195:91//Hs.41296:N71923  
 R-NT2RP3003726//Homo sapiens mRNA for KIAA0757 protein, complete cds//5.  
 6e-103:492:97//Hs.48513:AB018300  
 R-NT2RP3003746//ESTs//1.9e-85:411:98//Hs.54835:AI050863  
 R-NT2RP3003795//EST//6.2e-97:459:99//Hs.134769:AI089747  
 R-NT2RP3003799//ESTs//2.8e-62:337:94//Hs.124023:H18913  
 R-NT2RP3003800//PROTO-ONCOGENE TYROSINE-PROTEIN KINASE SRC//8.9e-108:551  
 :95//Hs.115742:AF077754  
 R-NT2RP3003805//ESTs//2.2e-103:490:99//Hs.9412:W72446  
 R-NT2RP3003809//ESTs, Highly similar to SAV PROTEIN [Sulfolobus acidoca  
 ldarius]//3.4e-89:456:95//Hs.5555:AI285198  
 R-NT2RP3003819//Interleukin 10//3.3e-43:173:89//Hs.2180:M57627  
 R-NT2RP3003825//ESTs//1.6e-66:485:80//Hs.7405:W27761  
 R-NT2RP3003828//ESTs, Weakly similar to unknown [H.sapiens]//9.6e-98:511  
 :95//Hs.26955:AI333224  
 R-NT2RP3003831//ESTs//2.2e-38:317:79//Hs.142173:AA757743  
 R-NT2RP3003833//Homo sapiens clones 24718 and 24825 mRNA sequence//5.2e-  
 110:541:97//Hs.25300:AF070611  
 R-NT2RP3003842//EST//9.9e-44:506:70//Hs.139093:AA166888  
 R-NT2RP3003846//ESTs//4.6e-10:66:100//Hs.74924:AI332962  
 R-NT2RP3003870//ESTs//3.4e-82:449:92//Hs.122691:AA152298  
 R-NT2RP3003876//ESTs//1.9e-89:449:96//Hs.45046:N40170  
 R-NT2RP3003914//ESTs//1.3e-99:470:98//Hs.118966:AA926726  
 R-NT2RP3003918//ESTs//1.3e-79:417:94//Hs.5005:W25933  
 R-NT2RP3003932//ESTs//6.0e-83:427:94//Hs.93581:H50221  
 R-NT2RP3003989//ESTs//4.8e-76:403:93//Hs.127243:W80409  
 R-NT2RP3003992//ESTs//2.4e-88:508:90//Hs.134200:D19593  
 R-NT2RP3004013//ESTs//3.7e-111:551:97//Hs.105108:AA781142

R-NT2RP3004016//ESTs//1.7e-81:394:98//Hs.63368:AA613714  
R-NT2RP3004041  
R-NT2RP3004051//ESTs//3.5e-69:386:93//Hs.51347:T72820  
R-NT2RP3004070//ESTs//5.5e-108:552:95//Hs.23392:AI310139  
R-NT2RP3004078//ESTs//3.3e-82:443:93//Hs.26407:W45387  
R-NT2RP3004093//ESTs//4.4e-83:426:94//Hs.140932:AI262104  
R-NT2RP3004095//ESTs//0.00013:93:78//Hs.36567:AA262045  
R-NT2RP3004110//ESTs, Weakly similar to similar to oxysterol-binding proteins: partial CDS [*C.elegans*]//3.5e-76:402:95//Hs.55847:W31092  
R-NT2RP3004125//ESTs//9.3e-74:363:97//Hs.32988:C01696  
R-NT2RP3004145//ESTs//2.6e-96:451:99//Hs.59584:AA587334  
R-NT2RP3004148//ESTs//1.3e-10:77:92//Hs.135890:AI183425  
R-NT2RP3004155//ESTs//1.7e-110:558:96//Hs.27003:AI279093  
R-NT2RP3004206//ESTs, Moderately similar to CROOKED NECK PROTEIN [*Drosophila melanogaster*]//1.8e-40:200:100//Hs.26089:AA195126  
R-NT2RP3004207//ESTs, Weakly similar to gene SEZ-6 [*M.musculus*]//1.1e-41:266:89//Hs.6314:AA522619  
R-NT2RP3004209//ESTs, Highly similar to PUTATIVE UBIQUITIN CARBOXYL-TERMINAL HYDROLASE C13A11.04C [*Schizosaccharomyces pombe*]//3.7e-112:547:97//Hs.99819:AI346680  
R-NT2RP3004215//ESTs//1.1e-103:541:95//Hs.124918:N64794  
R-NT2RP3004242//ESTs//4.5e-105:524:96//Hs.29724:N46252  
R-NT2RP3004246//EST//1.9e-07:67:91//Hs.125687:AA884827  
R-NT2RP3004253//EST//2.9e-88:454:94//Hs.127713:AA961628  
R-NT2RP3004258//ESTs, Weakly similar to PRE-MRNA SPLICING FACTOR SRP75 [*Homo sapiens*]//1.6e-89:468:95//Hs.5117:AA831530  
R-NT2RP3004262//ESTs//4.1e-86:443:96//Hs.101393:T87623  
R-NT2RP3004334//EST//0.00057:206:63//Hs.149388:AI273630  
R-NT2RP3004341//EST//0.00042:151:68//Hs.148498:AI200264

R-NT2RP3004348//Homo sapiens LIM protein mRNA, complete cds//5.9e-61:299  
:85//Hs.154103:AF061258

R-NT2RP3004349//EST//3.6e-42:175:88//Hs.161917:AA483223

R-NT2RP3004378//ESTs//0.27:294:60//Hs.66479:AA863044

R-NT2RP3004399//ESTs//5.8e-99:479:98//Hs.120234:AA732224

R-NT2RP3004424//EST, Highly similar to F21G4.6 [C.elegans]//0.30:253:58/  
/Hs.97184:AA385934

R-NT2RP3004428//ESTs//2.8e-48:279:91//Hs.106826:W25985

R-NT2RP3004451//ESTs//4.8e-101:509:96//Hs.29725:W74621

R-NT2RP3004454//Homo sapiens mRNA for KIAA0448 protein, complete cds//9.  
3e-108:526:98//Hs.27349:AB007917

R-NT2RP3004466//ESTs//0.25:51:90//Hs.7778:AA195616

R-NT2RP3004470//EST//0.032:70:71//Hs.147925:AI249332

R-NT2RP3004472//ESTs//0.0069:430:59//Hs.116651:AA993406

R-NT2RP3004475//Homo sapiens mRNA for KIAA0456 protein, partial cds//5.0  
e-107:521:97//Hs.5003:AB007925

R-NT2RP3004480

R-NT2RP3004490//ESTs//4.7e-68:354:95//Hs.163721:H42504

R-NT2RP3004498//ESTs, Moderately similar to ORF2: function unknown [H.sa  
piens]//3.4e-100:508:95//Hs.47393:AA218858

R-NT2RP3004503//ESTs//4.6e-90:478:93//Hs.133998:AA994735

R-NT2RP3004504//ESTs, Highly similar to cytoplasmic polyadenylation elem  
ent-binding protein [M.musculus]//1.8e-83:465:92//Hs.137064:AA318257

R-NT2RP3004507//ESTs//1.5e-98:495:96//Hs.128905:AI051971

R-NT2RP3004527//EST//1.6e-109:535:97//Hs.149481:AI279865

R-NT2RP3004534

R-NT2RP3004544//EST//0.035:226:60//Hs.99195:AA449232

R-NT2RP3004566//ESTs//4.1e-86:455:95//Hs.13110:T67461

R-NT2RP3004569//ESTs//2.9e-94:493:94//Hs.24948:AA977674

R-NT2RP3004572//ESTs//1.1e-92:437:99//Hs.24846:AI420493  
R-NT2RP3004578//ESTs//0.98:166:64//Hs.124593:AA854456  
R-NT2RP3004594//EST//5.8e-89:426:98//Hs.134213:AI080213  
R-NT2RP3004617//ESTs//1.4e-40:226:85//Hs.15921:R71157  
R-NT2RP3004618//ESTs//1.8e-38:229:90//Hs.125153:AA453723  
R-NT2RP3004670//Homo sapiens GN6ST mRNA for long form of N-acetylglucosamine-6-O-sulfotransferase (GlcNAc6ST), complete cds//7.2e-57:291:95//Hs.8786:AB014680  
R-NT2RP4000008//ESTs//8.9e-119:561:98//Hs.25035:AI123335  
R-NT2RP4000023//EST//1.2e-34:271:80//Hs.98300:AA418560  
R-NT2RP4000035//Small inducible cytokine A5 (RANTES)//2.1e-68:320:82//Hs.155464:AF088219  
R-NT2RP4000049//Homo sapiens TRAIL receptor 2 mRNA, complete cds//6.7e-60:289:82//Hs.51233:AF016266  
R-NT2RP4000051//ESTs, Weakly similar to protein B [H.sapiens]//8.3e-98:462:99//Hs.10114:AI345945  
R-NT2RP4000078//ESTs//0.00068:367:60//Hs.106090:AA457030  
R-NT2RP4000102//ESTs//9.7e-50:256:97//Hs.24266:R28287  
R-NT2RP4000109//Homo sapiens mRNA for MEGF5, partial cds//1.1e-107:536:96//Hs.57929:AB011538  
R-NT2RP4000129//Homo sapiens mRNA for KIAA0483 protein, partial cds//3.5e-112:554:97//Hs.64691:AB007952  
R-NT2RP4000147//ESTs//3.9e-11:122:80//Hs.25584:AA632014  
R-NT2RP4000150//EST//4.4e-84:510:88//Hs.144238:W52294  
R-NT2RP4000151//ESTs, Weakly similar to HYPOTHETICAL 31.0 KD PROTEIN R107.2 IN CHROMOSOME III [C.elegans]//5.7e-93:515:92//Hs.8083:AA521436  
R-NT2RP4000159//ESTs//0.0019:209:65//Hs.161816:AA400295  
R-NT2RP4000167//ESTs//2.1e-113:549:97//Hs.109441:N66569  
R-NT2RP4000185//ESTs//0.65:232:59//Hs.144445:AA807257

R-NT2RP4000210//Homo sapiens mRNA for KIAA0700 protein, partial cds//1.5e-100:505:96//Hs.13999:AB014600

R-NT2RP4000212//ESTs//8.5e-14:169:75//Hs.8520:AA081788

R-NT2RP4000214//Human mRNA for KIAA0392 gene, partial cds//6.2e-43:272:90//Hs.40100:AB002390

R-NT2RP4000218//ESTs//6.1e-10:335:64//Hs.105658:AA978185

R-NT2RP4000243//Homo sapiens mRNA for cartilage-associated protein (CASP) //2.9e-70:354:96//Hs.155481:AJ006470

R-NT2RP4000246//ESTs//7.1e-26:154:94//Hs.14838:AA502757

R-NT2RP4000259//Homo sapiens clone 683 unknown mRNA, complete sequence//9.3e-79:379:99//Hs.43728:AF091092

R-NT2RP4000263

R-NT2RP4000290//ESTs, Weakly similar to similar to Achlya ambisexualis antheridiol steroid receptor [C.elegans] //4.7e-104:525:96//Hs.152069:AA548972

R-NT2RP4000312//ESTs//8.2e-66:319:99//Hs.35091:AI271631

R-NT2RP4000321//Homo sapiens clone 24453 mRNA sequence//1.3e-109:513:99//Hs.13410:AF070524

R-NT2RP4000323//ESTs//7.7e-109:534:97//Hs.34790:AA192760

R-NT2RP4000355//ESTs//3.1e-44:320:83//Hs.141323:N80390

R-NT2RP4000360//Homo sapiens mRNA for KIAA0738 protein, complete cds//7.6e-111:520:99//Hs.107479:AB018281

R-NT2RP4000367//Homo sapiens IkappaB kinase complex associated protein (IKAP) mRNA, complete cds//2.8e-110:527:98//Hs.31323:AF044195

R-NT2RP4000370//ESTs//8.9e-32:166:98//Hs.70488:AI301130

R-NT2RP4000376//ESTs//6.8e-99:465:99//Hs.27182:AA604498

R-NT2RP4000381//ESTs//3.0e-50:280:93//Hs.8395:W27376

R-NT2RP4000415//ESTs, Weakly similar to coded for by C. elegans cDNA yk30b3.5 [C.elegans] //3.9e-87:499:91//Hs.26156:AA630975

R-NT2RP4000417//ESTs, Moderately similar to HYPOTHETICAL 91.2 KD PROTEIN IN RPS7A-SCH9 INTERGENIC REGION [*Saccharomyces cerevisiae*]//8.9e-95:468:96//Hs.93871:AI191318

R-NT2RP4000424//ESTs//3.7e-98:473:98//Hs.24945:AI189011

R-NT2RP4000448//ESTs//2.6e-79:446:91//Hs.25159:R60955

R-NT2RP4000449//ESTs//3.6e-98:468:98//Hs.31176:AI037953

R-NT2RP4000455//Homo sapiens N-methyl-D-aspartate receptor 2D subunit precursor (NMDAR2D) mRNA, complete cds//0.35:153:63//Hs.113286:U77783

R-NT2RP4000457//ESTs//4.5e-89:455:96//Hs.62638:AA127740

R-NT2RP4000480//ESTs//4.9e-92:431:99//Hs.121072:AI204167

R-NT2RP4000481

R-NT2RP4000500//ESTs, Weakly similar to HYPOTHETICAL 83.6 KD PROTEIN R05 D3.2 IN CHROMOSOME III [*C.elegans*]//1.2e-40:125:97//Hs.56124:AI424792

R-NT2RP4000515//EST//6.7e-30:183:90//Hs.150710:AI122713

R-NT2RP4000517//Aldehyde dehydrogenase 7//7.5e-28:183:76//Hs.83155:U10868

R-NT2RP4000518//EST//0.091:178:58//Hs.133031:AI049874

R-NT2RP4000519

R-NT2RP4000524//ESTs, Highly similar to rsec8 [*R.norvegicus*]//3.4e-93:496:93//Hs.107394:H07126

R-NT2RP4000528//EST//0.84:130:66//Hs.140208:AA702213

R-NT2RP4000541//EST//5.2e-63:337:94//Hs.156337:AI337328

R-NT2RP4000556//ESTs, Highly similar to 60S RIBOSOMAL PROTEIN L11 [*R.norvegicus*]//8.2e-92:448:98//Hs.25597:H93026

R-NT2RP4000588//ESTs//3.8e-94:445:98//Hs.44077:N28840

R-NT2RP4000614//ESTs//6.5e-18:159:83//Hs.24549:N57263

R-NT2RP4000638//ESTs//2.5e-46:296:87//Hs.132722:AA618531

R-NT2RP4000648//ESTs//2.6e-103:559:93//Hs.23794:W80393

R-NT2RP4000657//ESTs//1.0:189:60//Hs.87073:AA972704



R-NT2RP4000704//ESTs//2.8e-101:509:96//Hs.84824:AA935651  
 R-NT2RP4000724//ESTs//1.5e-83:442:94//Hs.142114:AA205615  
 R-NT2RP4000728//ESTs//0.84:61:75//Hs.145334:AI251399  
 R-NT2RP4000739//ESTs//8.8e-80:418:94//Hs.42959:N21211  
 R-NT2RP4000781//ESTs//1.4e-79:376:99//Hs.135458:AI081312  
 R-NT2RP4000817//Homo sapiens mRNA for KIAA0470 protein, complete cds//3.  
 1e-106:550:94//Hs.25132:AB007939  
 R-NT2RP4000833//ESTs//5.8e-46:309:85//Hs.163979:AA828834  
 R-NT2RP4000837//ESTs//1.7e-112:539:97//Hs.97718:AI334028  
 R-NT2RP4000855//ESTs//1.1e-95:486:95//Hs.5345:AA988104  
 R-NT2RP4000865//EST//6.2e-68:412:89//Hs.142196:AA258356  
 R-NT2RP4000878//ESTs//1.9e-80:417:95//Hs.104716:AI023185  
 R-NT2RP4000879//ESTs//1.8e-42:211:99//Hs.89991:AI374617  
 R-NT2RP4000907//ESTs//1.2e-89:453:97//Hs.100182:N92594  
 R-NT2RP4000915//EST//9.4e-06:197:63//Hs.145970:AI277106  
 R-NT2RP4000925//ESTs, Weakly similar to KIAA0405 [H.sapiens]//5.9e-17:13  
 4:85//Hs.14146:W92235  
 R-NT2RP4000927//ESTs//4.3e-14:84:100//Hs.155360:AA984683  
 R-NT2RP4000928//Homo sapiens CDP-diacylglycerol synthase 2 (CDS2) mRNA,  
 partial cds//8.2e-108:548:95//Hs.24812:AF069532  
 R-NT2RP4000929//ESTs//1.3e-119:567:98//Hs.62717:AA044905  
 R-NT2RP4000955//ESTs//3.5e-10:119:78//Hs.42946:N21111  
 R-NT2RP4000973//ESTs//2.8e-05:93:69//Hs.155126:AA563986  
 R-NT2RP4000975//ESTs//4.4e-58:324:95//Hs.126070:AA045179  
 R-NT2RP4000979//ESTs//3.5e-42:468:73//Hs.106210:AI193017  
 R-NT2RP4000984//Homo sapiens clone 23770 mRNA sequence//8.7e-120:570:98/  
 /Hs.12457:AF052123  
 R-NT2RP4000989//ESTs//1.3e-122:581:98//Hs.10499:AA528018  
 R-NT2RP4000996//ESTs//9.2e-113:579:94//Hs.23762:N26620

R-NT2RP4000997//Homo sapiens neuronal thread protein AD7c-NTP mRNA, complete cds//1.1e-28:439:68//Hs.129735:AF010144

R-NT2RP4001004//ESTs//3.6e-78:389:98//Hs.156290:AI016769

R-NT2RP4001006//ESTs, Moderately similar to ORF2: function unknown [H.sapiens] //6.6e-124:574:99//Hs.47393:AA218858

R-NT2RP4001010//EST//2.8e-31:194:90//Hs.161186:AI418635

R-NT2RP4001029//ESTs//4.4e-111:523:99//Hs.28423:AI336292

R-NT2RP4001041//ESTs, Highly similar to LEUCYL-TRNA SYNTHETASE, CYTOPLASMIC [Saccharomyces cerevisiae] //3.6e-114:569:96//Hs.6762:AA088424

R-NT2RP4001057//Homo sapiens KIAA0399 mRNA, partial cds//2.0e-51:282:94//Hs.100955:AB007859

R-NT2RP4001064//ESTs, Weakly similar to protein B [H.sapiens] //2.1e-103:485:99//Hs.10114:AI345945

R-NT2RP4001078

R-NT2RP4001079//Homo sapiens mRNA for putative Ca<sup>2+</sup>-transporting ATPase, partial//1.7e-119:569:98//Hs.106778:AJ010953

R-NT2RP4001080//ESTs//7.6e-10:65:100//Hs.131694:AA927668

R-NT2RP4001086//Homo sapiens mRNA for KIAA0592 protein, partial cds//5.9e-121:548:95//Hs.13273:AB011164

R-NT2RP4001095//ESTs//1.5e-113:563:96//Hs.118732:AI344055

R-NT2RP4001100//ESTs//2.0e-46:413:79//Hs.146314:R99617

R-NT2RP4001117//EST//7.4e-51:294:92//Hs.7260:T23737

R-NT2RP4001122//ESTs//5.4e-109:509:99//Hs.16390:AI052357

R-NT2RP4001126//EST//0.97:169:61//Hs.148107:AA693476

R-NT2RP4001138//ESTs//3.0e-110:543:97//Hs.57655:AI056890

R-NT2RP4001143//ESTs, Highly similar to HYPOTHETICAL 52.9 KD PROTEIN IN SAP155-YMR31 INTERGENIC REGION [Saccharomyces cerevisiae] //5.4e-113:573:96//Hs.5249:U55977

R-NT2RP4001148//ESTs//3.1e-103:490:98//Hs.121282:AI091453

R-NT2RP4001149//EST//1.7e-50:281:93//Hs.101727:H16171  
 R-NT2RP4001150//ESTs//1.9e-90:422:100//Hs.125490:AI138884  
 R-NT2RP4001159  
 R-NT2RP4001174//ESTs//2.5e-110:526:98//Hs.116555:AA639278  
 R-NT2RP4001206//ESTs//1.1e-25:140:97//Hs.83756:AI002822  
 R-NT2RP4001207//ESTs//4.4e-70:432:89//Hs.13109:AA192514  
 R-NT2RP4001210//ESTs//1.4e-108:509:99//Hs.27021:AI359495  
 R-NT2RP4001213//ESTs, Highly similar to ZINC FINGER PROTEIN 8 [Homo sapiens] //4.4e-123:624:95//Hs.22744:AI379892  
 R-NT2RP4001219//ESTs//0.0043:142:65//Hs.6733:AI160750  
 R-NT2RP4001228//ESTs//4.9e-101:482:98//Hs.62684:AA806103  
 R-NT2RP4001235//ESTs//3.7e-105:571:93//Hs.37706:AA005120  
 R-NT2RP4001256//ESTs//1.1e-12:189:74//Hs.20621:W28255  
 R-NT2RP4001260//EST//6.9e-05:313:61//Hs.116438:AA648430  
 R-NT2RP4001274//EST//0.0020:246:63//Hs.149955:AI289933  
 R-NT2RP4001276//ESTs//2.9e-34:213:91//Hs.43100:AA186588  
 R-NT2RP4001313  
 R-NT2RP4001315//EST//6.1e-38:217:93//Hs.97832:AA400892  
 R-NT2RP4001339//ESTs//3.8e-91:430:99//Hs.34840:AI279612  
 R-NT2RP4001345//ESTs//5.3e-89:443:96//Hs.6770:AA972732  
 R-NT2RP4001351//ESTs//6.0e-78:394:97//Hs.102796:N70837  
 R-NT2RP4001353//ESTs//4.8e-06:90:82//Hs.7778:AA195616  
 R-NT2RP4001372  
 R-NT2RP4001373//ESTs, Weakly similar to HYPOTHETICAL 48.8 KD PROTEIN IN TRK2-MRS4 INTERGENIC REGION [Saccharomyces cerevisiae] //1.7e-108:546:96//Hs.32271:AA203680  
 R-NT2RP4001375//ESTs//2.4e-19:155:87//Hs.62119:AA043299  
 R-NT2RP4001379//EST//4.4e-29:288:72//Hs.157848:AI362501  
 R-NT2RP4001389//ESTs, Highly similar to HYPOTHETICAL 51.6 KD PROTEIN IN

PAP1-MRPL13 INTERGENIC REGION [*Saccharomyces cerevisiae*]//3.8e-79:438:9  
 3//Hs.21938:W81045  
 R-NT2RP4001407//ESTs//8.3e-112:541:97//Hs.22587:AA743132  
 R-NT2RP4001414//ESTs//8.6e-18:117:90//Hs.90789:W27649  
 R-NT2RP4001433//ESTs, Moderately similar to PROHIBITIN [*H.sapiens*]//1.6e-102:498:97//Hs.62386:AA512948  
 R-NT2RP4001442//ESTs//8.8e-104:489:99//Hs.101619:AI339433  
 R-NT2RP4001447  
 R-NT2RP4001474  
 R-NT2RP4001483//ESTs//2.1e-100:528:92//Hs.17860:AA706655  
 R-NT2RP4001498//ESTs//1.1e-97:470:98//Hs.95744:AI392846  
 R-NT2RP4001502//ESTs//6.7e-73:382:96//Hs.11874:N93511  
 R-NT2RP4001507//ESTs//2.6e-57:302:96//Hs.65328:AA625385  
 R-NT2RP4001524//ESTs, Weakly similar to F13B12.1 [*C.elegans*]//2.9e-107:546:96//Hs.5570:AI377863  
 R-NT2RP4001529//ESTs//3.3e-112:524:99//Hs.28423:AI336292  
 R-NT2RP4001547//ESTs, Weakly similar to NADH-UBIQUINONE OXIDOREDUCTASE C HAIN 5 [*Paramecium tetraurelia*]//2.8e-120:566:98//Hs.108530:AA523928  
 R-NT2RP4001551//ESTs, Weakly similar to CELL DIVISION CONTROL PROTEIN 68 [*S.cerevisiae*]//1.4e-26:184:88//Hs.136189:AA133224  
 R-NT2RP4001555//ESTs//1.1e-95:445:100//Hs.134403:AA677552  
 R-NT2RP4001567//ESTs//2.8e-106:506:98//Hs.102708:AA292285  
 R-NT2RP4001568//ESTs//6.4e-55:300:94//Hs.57442:N63437  
 R-NT2RP4001571//ESTs//1.3e-114:556:97//Hs.30340:AA521251  
 R-NT2RP4001574//ESTs//0.0035:120:67//Hs.96339:AA225906  
 R-NT2RP4001575  
 R-NT2RP4001592//ESTs, Weakly similar to ISOLEUCYL-TRNA SYNTHETASE, MITOCHONDRIAL [*S.cerevisiae*]//8.7e-112:557:97//Hs.7558:AA526812  
 R-NT2RP4001610//ESTs//6.2e-77:382:96//Hs.21543:AA166776

R-NT2RP4001614//ESTs//2.8e-117:565:98//Hs.9591:AA069657  
R-NT2RP4001634//ESTs//2.0e-39:213:96//Hs.32360:AA534737  
R-NT2RP4001638//Homo sapiens clone 23967 unknown mRNA, partial cds//1.7e-116:559:97//Hs.5332:AF007151  
R-NT2RP4001644//ESTs, Moderately similar to MNK1 [H.sapiens]//5.3e-36:192:97//Hs.5662:AA868361  
R-NT2RP4001656//ESTs, Highly similar to HYPOTHETICAL 108.5 KD PROTEIN R06F6.2 IN CHROMOSOME II [Caenorhabditis elegans]//1.1e-104:525:96//Hs.20472:W28734  
R-NT2RP4001677//ESTs//1.8e-106:522:97//Hs.106390:AA156805  
R-NT2RP4001696//Human chromosome 8 BAC clone CIT987SK-2A8 complete sequence//5.7e-118:583:96//Hs.15562:U96629  
R-NT2RP4001725//ESTs//2.0e-11:141:74//Hs.117589:N25941  
R-NT2RP4001730//ESTs, Weakly similar to UDP-GLUCOSE:GLYCOPROTEIN GLUCOSYLTRANSFERASE PRECURSOR [D.melanogaster]//3.4e-73:362:97//Hs.152332:AI141922  
R-NT2RP4001739//ESTs//6.6e-59:340:91//Hs.122293:AA843692  
R-NT2RP4001753//Zinc finger protein 3 (A8-51)//5.6e-113:552:96//Hs.2481:X78926  
R-NT2RP4001760//ESTs//2.5e-94:453:98//Hs.122579:AA766315  
R-NT2RP4001790//ESTs, Weakly similar to ZINC FINGER PROTEIN 84 [H.sapiens]//2.0e-62:326:94//Hs.110839:W28098  
R-NT2RP4001803  
R-NT2RP4001822//ESTs//4.4e-98:526:92//Hs.96908:AI161133  
R-NT2RP4001823//ESTs//1.7e-72:357:97//Hs.144900:AI218434  
R-NT2RP4001828//ESTs//3.3e-101:536:92//Hs.18851:AA857826  
R-NT2RP4001838//ESTs//4.2e-58:344:90//Hs.48723:N66663  
R-NT2RP4001849//EST//0.24:105:71//Hs.136747:AA749210  
R-NT2RP4001889//Human mRNA for KIAA0118 gene, partial cds//3.4e-34:212:8

8//Hs.154326:D42087  
R-NT2RP4001893//ESTs//3.0e-58:321:95//Hs.158787:W79602  
R-NT2RP4001896//EST//3.8e-15:108:92//Hs.160835:AI345528  
R-NT2RP4001901//ESTs//1.2e-110:536:97//Hs.31443:AI018606  
R-NT2RP4001927//ESTs//2.1e-105:546:93//Hs.73291:AI417099  
R-NT2RP4001938//ESTs//2.8e-40:235:78//Hs.163641:R61848  
R-NT2RP4001946//ESTs//1.3e-29:175:93//Hs.43703:AA088436  
R-NT2RP4001950//ESTs//4.6e-95:458:98//Hs.150890:AI341793  
R-NT2RP4001953//Clathrin, light polypeptide (Lcb)//2.3e-62:310:82//Hs.73  
919:X81637  
R-NT2RP4001966//ESTs, Weakly similar to tenascin-like protein [D.melanog  
aster] //8.3e-87:457:94//Hs.41793:AA775879  
R-NT2RP4001975//ESTs//1.9e-52:281:94//Hs.7704:W58252  
R-NT2RP4002018  
R-NT2RP4002047//ESTs, Highly similar to GTP-BINDING PROTEIN LEPA [Pseud  
omonas fluorescens] //4.7e-09:90:86//Hs.41127:AA555184  
R-NT2RP4002052//ESTs//0.054:353:60//Hs.117510:AA903738  
R-NT2RP4002058//EST//7.8e-26:151:94//Hs.124617:AA855106  
R-NT2RP4002071//ESTs//6.9e-99:475:98//Hs.29216:AA916679  
R-NT2RP4002075//ESTs//0.67:121:65//Hs.153939:AI284198  
R-NT2RP4002078//ESTs, Highly similar to ZINC FINGER PROTEIN 35 [Homo sa  
piens] //1.6e-61:464:82//Hs.144228:N99507  
R-NT2RP4002081//ESTs, Weakly similar to HYPOTHETICAL 139.1 KD PROTEIN CO  
8B11.3 IN CHROMOSOME II [C.elegans] //2.3e-56:271:100//Hs.6185:AA428565  
R-NT2RP4002083//ESTs//2.0e-108:548:96//Hs.6120:W80407  
R-NT2RP4002408//ESTs//2.6e-77:391:96//Hs.14014:AA745592  
R-NT2RP4002791//ESTs//7.9e-101:527:93//Hs.22394:N32555  
R-NT2RP4002888//ESTs, Highly similar to ENV POLYPROTEIN [Avian spleen n  
ecrosis virus] //1.9e-65:373:92//Hs.31532:H18272

R-NT2RP4002905//ESTs//1.5e-107:517:98//Hs.40460:N36090  
 R-OVARC1000001//Homo sapiens mRNA for KIAA0465 protein, partial cds//2.8  
 e-115:605:94//Hs.108258:AB007934  
 R-OVARC1000004  
 R-OVARC1000006//ESTs//1.5e-19:139:89//Hs.143034:AI126929  
 R-OVARC1000013//ESTs//5.9e-98:531:93//Hs.16470:AA121635  
 R-OVARC1000014//ESTs//0.24:243:60//Hs.19569:AA464273  
 R-OVARC1000017  
 R-OVARC1000035//ESTs//0.035:252:63//Hs.134123:AI078286  
 R-OVARC1000058//H.sapiens mRNA for translin associated protein X//3.8e-4  
 6:331:83//Hs.96247:X95073  
 R-OVARC1000060//EST//2.8e-28:348:71//Hs.141728:W73041  
 R-OVARC1000068//ESTs//3.0e-83:491:90//Hs.29397:N51367  
 R-OVARC1000071//ESTs//2.5e-60:321:96//Hs.25010:R67871  
 R-OVARC1000085//Proteasome component C5//8.6e-67:366:92//Hs.75748:AL0312  
 59  
 R-OVARC1000087//ESTs//1.0e-111:526:98//Hs.129020:AI380703  
 R-OVARC1000091//ESTs, Weakly similar to HOST CELL FACTOR C1 [H.sapiens] /  
 /3.9e-112:596:94//Hs.20597:W58370  
 R-OVARC1000092//ESTs//5.1e-18:144:82//Hs.109140:AI289942  
 R-OVARC1000106  
 R-OVARC1000113//Homo sapiens okadaic acid-inducible phosphoprotein (OA48  
 -18) mRNA, complete cds//8.3e-102:495:97//Hs.3688:AF069250  
 R-OVARC1000114//H.sapiens mRNA for phosphoinositide 3-kinase//1.7e-45:48  
 9:74//Hs.101238:Y11312  
 R-OVARC1000133//EST//0.00028:284:61//Hs.30547:H05482  
 R-OVARC1000145//EST//3.9e-40:201:99//Hs.156148:AI333214  
 R-OVARC1000148//EST//0.79:150:62//Hs.100078:T05090  
 R-OVARC1000151

R-OVARC1000168//EST//1.7e-19:142:90//Hs.38441:H66023  
 R-OVARC1000191//EST//0.0072:292:63//Hs.132492:AA922629  
 R-OVARC1000198//Homo sapiens LIM protein mRNA, complete cds//6.1e-44:339  
 :81//Hs.154103:AF061258  
 R-OVARC1000209//ESTs, Moderately similar to ZINC FINGER PROTEIN 93 [H.sa  
 piens]//1.1e-32:196:92//Hs.64322:AA142864  
 R-OVARC1000212//EST//0.20:178:61//Hs.133031:AI049874  
 R-OVARC1000240//ESTs//9.0e-64:314:98//Hs.42300:AA204958  
 R-OVARC1000241//EST//0.00018:115:68//Hs.150728:AI123130  
 R-OVARC1000288//ESTs, Highly similar to HYPOTHETICAL 54.2 KD PROTEIN IN  
 CDC12-ORC6 INTERGENIC REGION [Saccharomyces cerevisiae]//3.3e-74:403:93  
 //Hs.108117:AI097079  
 R-OVARC1000302//EST//4.0e-14:102:90//Hs.136617:AA630476  
 R-OVARC1000304//ESTs, Highly similar to PUTATIVE GTP-BINDING PROTEIN MO  
 V10 [Mus musculus]//2.9e-37:191:98//Hs.20725:AI027777  
 R-OVARC1000309//ESTs//3.6e-66:348:94//Hs.9547:AA532449  
 R-OVARC1000321//ESTs//3.6e-87:454:95//Hs.110445:AA044743  
 R-OVARC1000326//ESTs, Moderately similar to lamina associated polypeptid  
 e 1C [R.norvegicus]//1.3e-98:488:96//Hs.125749:AI377682  
 R-OVARC1000335//ESTs//3.0e-115:565:97//Hs.54835:AI050863  
 R-OVARC1000347//EST//0.0018:145:65//Hs.136945:AA765672  
 R-OVARC1000384//ESTs//2.8e-38:253:89//Hs.15093:AA203423  
 R-OVARC1000408//ESTs//2.6e-98:515:94//Hs.119808:C05928  
 R-OVARC1000411//ESTs//3.2e-82:395:98//Hs.104747:AA406219  
 R-OVARC1000414//Landsteiner-Wiener blood group glycoprotein//1.5e-27:211  
 :79//Hs.108287:L27670  
 R-OVARC1000420//EST//2.8e-38:255:74//Hs.138525:R99237  
 R-OVARC1000427//EST//2.6e-58:302:96//Hs.122914:AA767034  
 R-OVARC1000431//ESTs//4.9e-108:551:96//Hs.11668:AI123426



R-OVARC1000437  
 R-OVARC1000440//ESTs//2.9e-91:456:96//Hs.93701:AI018671  
 R-OVARC1000442//Human high-affinity copper uptake protein (hCTR1) mRNA,  
 complete cds//4.3e-45:320:84//Hs.73614:U83460  
 R-OVARC1000443//Homo sapiens mRNA for KIAA0683 protein, complete cds//3.  
 6e-79:418:94//Hs.12334:AB014583  
 R-OVARC1000461//ESTs//3.1e-62:342:93//Hs.23241:R46582  
 R-OVARC1000465//ESTs//1.7e-67:349:95//Hs.127238:AA477576  
 R-OVARC1000466//ESTs//1.9e-66:337:95//Hs.5212:AI421211  
 R-OVARC1000473//ESTs//5.4e-89:320:99//Hs.29173:AA134926  
 R-OVARC1000479//ESTs, Highly similar to TIP120 [R.norvegicus]//1.1e-102:  
 514:96//Hs.11833:AI299947  
 R-OVARC1000486//ESTs//3.9e-78:405:95//Hs.98312:AA424983  
 R-OVARC1000496  
 R-OVARC1000520//ESTs//1.2e-20:145:88//Hs.87456:AA434484  
 R-OVARC1000526//Small inducible cytokine A5 (RANTES)//8.9e-47:217:87//Hs  
 .155464:AF088219  
 R-OVARC1000533//ESTs, Moderately similar to integrase [H.sapiens]//8.5e-  
 48:264:92//Hs.49860:AA702248  
 R-OVARC1000543//ESTs//5.7e-74:410:94//Hs.62817:AA047021  
 R-OVARC1000556//H.sapiens mRNA for ribosomal S6 kinase//9.5e-27:202:85//  
 Hs.90859:X85106  
 R-OVARC1000557//EST//2.8e-18:169:79//Hs.149101:AI244285  
 R-OVARC1000564//EST//2.3e-34:199:92//Hs.146637:AI141587  
 R-OVARC1000573//Interleukin 10//4.7e-42:300:83//Hs.2180:M57627  
 R-OVARC1000578//Small inducible cytokine A5 (RANTES)//5.2e-58:392:84//Hs  
 .155464:AF088219  
 R-OVARC1000588//EST//1.8e-41:174:85//Hs.163333:AA879053  
 R-OVARC1000605

R-OVARC1000622//Homo sapiens mRNA, chromosome 1 specific transcript KIAA  
0501//6.4e-47:417:77//Hs.159897:AB007970

R-OVARC1000640//H.sapiens mRNA for translin associated protein X//1.9e-2  
8:366:72//Hs.96247:X95073

R-OVARC1000661//Homo sapiens mRNA for KIAA0590 protein, complete cds//5.  
1e-31:162:100//Hs.111862:AB011162

R-OVARC1000678//EST//0.92:199:60//Hs.122025:AA778480

R-OVARC1000679//ESTs//0.94:416:59//Hs.130754:AA279522

R-OVARC1000681//EST//9.2e-21:179:80//Hs.132635:AI032875

R-OVARC1000689//Homo sapiens ataxin-7 (SCA7) mRNA, complete cds//0.053:1  
60:64//Hs.108447:AJ000517

R-OVARC1000700//Homo sapiens KIAA0441 mRNA, complete cds//7.1e-09:141:73  
//Hs.32511:AB007901

R-OVARC1000703//ESTs//1.7e-46:298:87//Hs.138856:H47461

R-OVARC1000730//ESTs, Weakly similar to C27F2.7 gene product [C.elegans]  
//1.7e-17:137:86//Hs.7049:AI141736

R-OVARC1000746//ESTs//0.16:366:60//Hs.136969:AA830918

R-OVARC1000769//ESTs, Weakly similar to eukaryotic initiation factor eIF  
-2 alpha kinase [D.melanogaster]//4.6e-28:430:69//Hs.42457:AA523306

R-OVARC1000771//ESTs//1.3e-87:461:94//Hs.22399:AA531016

R-OVARC1000781//ESTs//8.3e-119:572:97//Hs.41972:AA626793

R-OVARC1000787//ESTs//7.4e-18:115:93//Hs.164036:AA845659

R-OVARC1000800//MITOCHONDRIAL STRESS-70 PROTEIN PRECURSOR//4.9e-19:119:9  
5//Hs.3069:L11066

R-OVARC1000802//ESTs//2.2e-41:383:78//Hs.161228:AI419764

R-OVARC1000834//Homo sapiens mRNA for atopy related autoantigen CALC//1.  
2e-106:536:95//Hs.61628:Y17711

R-OVARC1000846//Clathrin, light polypeptide (Lcb)//1.6e-66:282:87//Hs.73  
919:X81637

R-OVARC1000850//Homo sapiens PB39 mRNA, complete cds//1.2e-115:579:96//Hs.18910:AF045584

R-OVARC1000862//EST//4.3e-14:129:81//Hs.150663:AA923096

R-OVARC1000876//ESTs//1.0e-115:573:96//Hs.87287:AI150674

R-OVARC1000883//ESTs//3.5e-109:523:98//Hs.28423:AI336292

R-OVARC1000885//ESTs, Highly similar to HYPOTHETICAL OXIDOREDUCTASE IN ROCC-PTA INTERGENIC REGION [Bacillus subtilis]//7.9e-98:525:93//Hs.10366:W21953

R-OVARC1000886//ESTs//8.2e-79:417:94//Hs.7729:AA830777

R-OVARC1000891//ESTs//6.8e-75:401:94//Hs.5833:H15401

R-OVARC1000897//ESTs//3.5e-91:440:98//Hs.125264:AA873350

R-OVARC1000912

R-OVARC1000915//ESTs//1.0e-45:328:82//Hs.163980:AA715814

R-OVARC1000924//ESTs//1.0e-100:501:96//Hs.30204:AA497127

R-OVARC1000936//EST//3.0e-74:367:98//Hs.145098:AA421696

R-OVARC1000937//EST//1.1e-53:290:95//Hs.162846:AA631215

R-OVARC1000945//ESTs//4.9e-51:301:89//Hs.20100:W25794

R-OVARC1000948//ESTs//3.7e-67:332:98//Hs.112570:AA621971

R-OVARC1000959//Small inducible cytokine A5 (RANTES)//7.2e-44:283:86//Hs.155464:AF088219

R-OVARC1000960//Homo sapiens KIAA0395 mRNA, partial cds//1.1e-41:348:80//Hs.43681:AL022394

R-OVARC1000971//EST//6.2e-05:126:70//Hs.160491:AI254909

R-OVARC1000984//ESTs, Weakly similar to No definition line found [C.elegans]//3.5e-68:346:96//Hs.25544:AA532784

R-OVARC1000996//EST//0.12:92:71//Hs.117141:AA678811

R-OVARC1000999//Homo sapiens KIAA0414 mRNA, partial cds//1.5e-44:513:73//Hs.127649:AB007874

R-OVARC1001000//ESTs//1.8e-22:198:80//Hs.140608:N53448

R-OVARC1001004//Human kpni repeat mrna (cdna clone pcd-kpni-4), 3' end//  
1.7e-28:181:77//Hs.139107:K00629

R-OVARC1001010//EST//2.1e-09:92:85//Hs.147893:AI223270

R-OVARC1001011//EST//2.4e-14:200:75//Hs.149290:AI248117

R-OVARC1001032//EST//2.7e-29:304:73//Hs.141733:W80630

R-OVARC1001034//Homo sapiens apoptotic protease activating factor 1 (Apa  
f-1) mRNA, complete cds//2.1e-09:137:74//Hs.77579:AF013263

R-OVARC1001038//Homo sapiens TRIAD1 type I mRNA, complete cds//4.1e-101:  
501:96//Hs.9899:AF099149

R-OVARC1001040//ESTs//2.9e-87:415:99//Hs.132812:AI032046

R-OVARC1001044//ESTs//1.1e-83:432:96//Hs.55043:N94384

R-OVARC1001051//60S RIBOSOMAL PROTEIN L41//1.2e-16:124:88//Hs.108124:Z12  
962

R-OVARC1001055//ESTs//2.4e-23:238:76//Hs.141421:H99231

R-OVARC1001062//ESTs//3.4e-92:469:96//Hs.34658:N98652

R-OVARC1001068//Homo sapiens Era GTPase A protein (HERA-A) mRNA, partial  
cds//7.3e-97:463:98//Hs.3426:AF082657

R-OVARC1001072//ESTs//1.3e-34:227:89//Hs.126704:W95844

R-OVARC1001074

R-OVARC1001085//Human T-cell leukemia virus enhancer factor//1.0:94:69//  
Hs.103126:U57029

R-OVARC1001092//Homo sapiens mRNA for JM5 protein, complete CDS (clone I  
MAGE 53337, LLNLc110F1857Q7 (RZPD Berlin) and LLNLc110G0913Q7 (RZPD Berl  
in))//1.4e-96:325:98//Hs.21753:AJ005897

R-OVARC1001113//Homo sapiens diaphanous 1 (HDIA1) mRNA, complete cds//3.  
3e-75:386:95//Hs.26584:AF051782

R-OVARC1001117//Human G protein-coupled receptor (STRL22) mRNA, complete  
cds//3.9e-37:283:84//Hs.46468:U45984

R-OVARC1001118//ESTs//5.3e-99:485:97//Hs.130815:AA936548

R-OVARC1001129//ESTs//9.8e-66:351:95//Hs.18616:T99312  
R-OVARC1001161//ESTs, Moderately similar to !!!! ALU SUBFAMILY SX WARNIN  
G ENTRY !!!! [H.sapiens]//2.2e-66:346:95//Hs.53263:AA173226  
R-OVARC1001162//EST//1.5e-44:376:80//Hs.161917:AA483223  
R-OVARC1001167//ESTs//4.7e-110:548:96//Hs.35254:AI133727  
R-OVARC1001169//ESTs//0.22:152:68//Hs.149424:AI274200  
R-OVARC1001170//Small inducible cytokine A5 (RANTES)//1.8e-42:305:84//Hs  
.155464:AF088219  
R-OVARC1001173//EST//2.5e-35:182:84//Hs.161917:AA483223  
R-OVARC1001180//Human macrophage-derived chemokine precursor (MDC) mRNA,  
complete cds//6.6e-64:247:80//Hs.97203:U83171  
R-OVARC1001188//ESTs//4.1e-18:296:69//Hs.139197:AA228343  
R-OVARC1001200//ESTs//2.0e-28:207:85//Hs.35121:AA877826  
R-OVARC1001232//ESTs//3.2e-61:358:91//Hs.6449:W95025  
R-OVARC1001240//ESTs//6.7e-45:316:85//Hs.121675:AA629668  
R-OVARC1001243//ESTs//2.3e-86:409:99//Hs.163091:AA742361  
R-OVARC1001261//ESTs//0.63:125:64//Hs.155743:AI344166  
R-OVARC1001268//ESTs//8.1e-20:113:98//Hs.109477:AA477929  
R-OVARC1001270//ESTs//1.5e-107:530:97//Hs.62905:AA460708  
R-OVARC1001271//ESTs//4.5e-36:401:72//Hs.20190:AA525532  
R-OVARC1001282//EST//4.0e-91:428:99//Hs.145599:AI263113  
R-OVARC1001296//ESTs//2.6e-63:301:100//Hs.125753:AA740885  
R-OVARC1001306//Homo sapiens mRNA for KIAA0518 protein, partial cds//3.8  
e-70:334:100//Hs.23763:AB011090  
R-OVARC1001329//Clathrin, light polypeptide (Lcb)//1.3e-68:304:83//Hs.73  
919:X81637  
R-OVARC1001330//Proline arginine-rich end leucine-rich repeat protein//1  
.0:147:63//Hs.76494:U41344  
R-OVARC1001339//Small inducible cytokine A5 (RANTES)//5.0e-48:452:76//Hs

.155464:AF088219  
R-OVARC1001341//ESTs, Moderately similar to !!!! ALU SUBFAMILY SQ WARNIN  
G ENTRY !!!! [H.sapiens]//6.9e-85:464:93//Hs.23651:AA650356  
R-OVARC1001342//40S RIBOSOMAL PROTEIN S8//4.9e-110:568:95//Hs.118690:X67  
247  
R-OVARC1001344//EST//3.6e-44:341:81//Hs.162197:AA535216  
R-OVARC1001357//TUMOR-ASSOCIATED ANTIGEN L6//9.8e-44:250:93//Hs.3337:M90  
657  
R-OVARC1001360//ESTs//5.2e-110:534:98//Hs.24743:AA843844  
R-OVARC1001369//ESTs//1.7e-98:478:97//Hs.7729:AA830777  
R-OVARC1001372//ESTs//2.6e-97:456:99//Hs.153648:AI341415  
R-OVARC1001376//Homo sapiens mRNA for KIAA0575 protein, complete cds//1.  
1e-53:344:72//Hs.153468:AB011147  
R-OVARC1001381//ESTs//5.1e-19:200:66//Hs.114031:AA700958  
R-OVARC1001391  
R-OVARC1001399//ESTs//0.0039:48:95//Hs.117964:N20913  
R-OVARC1001417//Homo sapiens EXLM1 mRNA, complete cds//3.2e-111:561:95//  
Hs.21586:AB006651  
R-OVARC1001419  
R-OVARC1001425//EST//5.7e-20:395:66//Hs.159707:AI393136  
R-OVARC1001436//ESTs//9.6e-90:427:99//Hs.6982:AA622427  
R-OVARC1001442//ESTs//1.1e-66:317:100//Hs.18437:AI206345  
R-OVARC1001453//ESTs//2.0e-20:163:84//Hs.133503:AA628592  
R-OVARC1001476//EST//0.23:125:66//Hs.71444:AA131700  
R-OVARC1001480//ESTs//3.1e-56:181:97//Hs.40109:AA928694  
R-OVARC1001489//ESTs//1.0:297:58//Hs.86723:AA393089  
R-OVARC1001496//Homo sapiens C-terminal binding protein 2 mRNA, complete  
cds//3.0e-117:585:96//Hs.6534:AF016507  
R-OVARC1001506//Small inducible cytokine A5 (RANTES)//1.8e-48:283:90//Hs

.155464:AF088219

R-OVARC1001525//EST//0.80:170:60//Hs.157398:AI364539

R-OVARC1001542//Homo sapiens hJTB mRNA, complete cds//1.6e-111:566:95//Hs.6396:AB016492

R-OVARC1001547//ESTs//5.7e-105:564:93//Hs.68835:AA088388

R-OVARC1001577//Homo sapiens SRp46 splicing factor retropseudogene mRNA//4.4e-20:150:89//Hs.155160:AF031166

R-OVARC1001600//Human mRNA for KIAA0118 gene, partial cds//8.6e-21:282:72//Hs.154326:D42087

R-OVARC1001610//ESTs//4.6e-108:555:95//Hs.44295:N32019

R-OVARC1001611//ESTs//0.0021:117:71//Hs.135568:AA972965

R-OVARC1001615//Homo sapiens KIAA0409 mRNA, partial cds//9.2e-19:114:78//Hs.5158:AB007869

R-OVARC1001668//ESTs//1.0:127:69//Hs.153290:AI022659

R-OVARC1001702//ESTs//4.8e-44:225:97//Hs.96855:AA346854

R-OVARC1001703//ESTs//2.3e-89:426:99//Hs.27099:W60080

R-OVARC1001711//ESTs//1.9e-57:251:99//Hs.9732:AA527784

R-OVARC1001726//ESTs, Highly similar to APICAL PROTEIN [Xenopus laevis]//1.2e-27:236:81//Hs.15485:AA046954

R-OVARC1001731//Tropomyosin 4 (fibroblast)//7.9e-74:422:90//Hs.102824:X05276

R-OVARC1001745//Human mRNA for tryptophan hydroxylase (EC 1.14.16.4)//1.7e-62:300:83//Hs.144563:AF057280

R-OVARC1001762//ESTs, Weakly similar to N-TERMINAL ACETYLTRANSFERASE 1 [S.cerevisiae]//6.8e-100:540:92//Hs.117741:AA903456

R-OVARC1001766//Homo sapiens eukaryotic translation initiation factor eIF3, p35 subunit mRNA, complete cds//1.1e-109:567:94//Hs.155377:U97670

R-OVARC1001767//Homo sapiens mRNA for KIAA0675 protein, complete cds//2.0e-109:529:97//Hs.15869:AB014575

R-OVARC1001768//ESTs//3.5e-59:327:94//Hs.107923:H66127  
 R-OVARC1001791//ESTs//1.3e-111:565:96//Hs.6107:AA160604  
 R-OVARC1001795//ESTs//2.8e-97:526:93//Hs.72158:AA156978  
 R-OVARC1001802//Homo sapiens DEC-205 mRNA, complete cds//4.8e-36:276:81/  
 /Hs.153563:AF011333  
 R-OVARC1001805//ESTs//4.1e-78:375:98//Hs.126902:AI374688  
 R-OVARC1001812//EST//4.8e-45:349:80//Hs.162677:AA604831  
 R-OVARC1001813//Homo sapiens mRNA for KIAA0538 protein, partial cds//2.1  
 e-15:519:63//Hs.25639:AB011110  
 R-OVARC1001820//ESTs//9.5e-50:314:80//Hs.140491:W52705  
 R-OVARC1001828//ESTs//0.11:186:63//Hs.29055:AI374621  
 R-OVARC1001846//ESTs//0.34:134:66//Hs.152992:AI242160  
 R-OVARC1001861//ESTs//2.3e-19:120:92//Hs.42225:N31809  
 R-OVARC1001873//Homo sapiens clones 24718 and 24825 mRNA sequence//1.9e-  
 105:571:91//Hs.25300:AF070611  
 R-OVARC1001879//EST//1.3e-24:185:85//Hs.136617:AA630476  
 R-OVARC1001880//Homo sapiens mRNA for KIAA0575 protein, complete cds//2.  
 2e-49:302:90//Hs.153468:AB011147  
 R-OVARC1001883//ESTs//1.0e-51:295:93//Hs.164059:AA447310  
 R-OVARC1001900//Homo sapiens tumorous imaginal discs protein Tid56 homol  
 og (TID1) mRNA, complete cds//1.6e-87:346:90//Hs.6216:AF061749  
 R-OVARC1001901//ESTs//6.8e-24:132:98//Hs.130797:AA904435  
 R-OVARC1001911//ESTs//1.1e-88:491:92//Hs.32343:W73855  
 R-OVARC1001916//ESTs//7.9e-97:491:95//Hs.24989:H97842  
 R-OVARC1001928  
 R-OVARC1001942//ESTs, Weakly similar to N-TERMINAL ACETYLTRANSFERASE 1 [  
 S.cerevisiae] //2.5e-39:253:88//Hs.117741:AA903456  
 R-OVARC1001943//ESTs//9.3e-13:78:100//Hs.143680:W38637  
 R-OVARC1001949//ESTs, Highly similar to ZINC FINGER PROTEIN 8. [Homo sap



iens] //8.3e-96:498:94//Hs.22744:AI379892  
R-OVARC1001950//EST//1.3e-35:236:81//Hs.132635:AI032875  
R-OVARC1001987//ESTs//5.6e-94:514:92//Hs.21148:AI183729  
R-OVARC1001989//ESTs//9.7e-46:228:99//Hs.127046:AA935887  
R-OVARC1002044//ESTs//3.4e-45:303:85//Hs.132722:AA618531  
R-OVARC1002050//Homo sapiens mRNA for KIAA0465 protein, partial cds//4.4  
e-109:542:96//Hs.108258:AB007934  
R-OVARC1002066//ESTs//8.5e-97:455:99//Hs.135477:AI088556  
R-OVARC1002082//Homo sapiens mRNA for KIAA0772 protein, complete cds//8.  
1e-47:340:82//Hs.15519:AB018315  
R-OVARC1002107//ESTs//5.9e-103:498:98//Hs.157207:AA629860  
R-OVARC1002127//ESTs//3.0e-87:419:98//Hs.127833:AI347130  
R-OVARC1002138//ESTs, Weakly similar to HYPOTHETICAL 54.7 KD PROTEIN C07  
A9.1 IN CHROMOSOME III [Caenorhabditis elegans]//1.7e-102:485:98//Hs.137  
516:AA805691  
R-OVARC1002143//ESTs//1.3e-79:428:92//Hs.158126:W26825  
R-OVARC1002156//ESTs//1.6e-38:198:98//Hs.22957:AA478923  
R-OVARC1002158//ESTs//7.3e-81:412:96//Hs.12211:AA908631  
R-OVARC1002165//ESTs//1.8e-09:154:72//Hs.49354:AA424160  
R-OVARC1002182//ESTs//4.3e-80:465:91//Hs.77067:AA040478  
R-PLACE1000004//ESTs, Weakly similar to TEICHOIC ACID BIOSYNTHESIS PROTE  
IN A [Bacillus subtilis]//7.5e-32:164:99//Hs.144194:AA706337  
R-PLACE1000005//EST//0.37:212:60//Hs.127020:AA934920  
R-PLACE1000007//Homo sapiens clone 24422 mRNA sequence//3.8e-16:100:97//  
Hs.109268:AF070557  
R-PLACE1000014//EST//9.6e-44:344:77//Hs.161917:AA483223  
R-PLACE1000031//ESTs//2.2e-32:374:70//Hs.117969:H94870  
R-PLACE1000040//ESTs//0.00017:316:59//Hs.23342:AI310440  
R-PLACE1000048//Human Line-1 repeat mRNA with 2 open reading frames//4.8

e-79:519:86//Hs.23094:M19503  
R-PLACE1000050//ESTs//9.7e-90:453:96//Hs.27410:N25612  
R-PLACE1000061//Ribosomal protein L37a//5.5e-22:126:97//Hs.1946:L06499  
R-PLACE1000066//ESTs, Weakly similar to coded for by C. elegans cDNA yk1  
Oc10.3 [C.elegans] //1.4e-61:331:94//Hs.30026:A1356771  
R-PLACE1000078//ESTs//2.6e-30:212:85//Hs.89312:AA167659  
R-PLACE1000081  
R-PLACE1000094  
R-PLACE1000133//ESTs//4.4e-87:448:94//Hs.93748:AA884505  
R-PLACE1000142//ESTs, Weakly similar to enoyl-CoA hydratase [H.sapiens] /  
/5.5e-103:538:94//Hs.9670:AA632135  
R-PLACE1000184//Homo sapiens estrogen-related receptor gamma mRNA, compl  
ete cds//4.1e-114:594:94//Hs.151017:AF058291  
R-PLACE1000185//ESTs, Weakly similar to No definition line found [C.eleg  
ans] //2.0e-19:114:95//Hs.7036:W22072  
R-PLACE1000213//ESTs//9.4e-99:494:96//Hs.24398:A1262946  
R-PLACE1000214//ESTs//5.3e-98:466:98//Hs.28661:AA805916  
R-PLACE1000236//Human BENE mRNA, partial cds//1.7e-19:162:84//Hs.85889:U  
17077  
R-PLACE1000246//EST//0.026:134:66//Hs.135611:Z21545  
R-PLACE1000292//ESTs//2.5e-80:418:96//Hs.138233:N57912  
R-PLACE1000332//EST//1.7e-82:422:96//Hs.118637:T61940  
R-PLACE1000347//ESTs//8.5e-36:180:100//Hs.6377:AA632424  
R-PLACE1000374//ESTs//2.8e-90:434:98//Hs.161785:A1423126  
R-PLACE1000380//ESTs//1.0e-81:399:97//Hs.47105:A1334994  
R-PLACE1000383//ESTs//3.7e-75:405:94//Hs.23200:AA203708  
R-PLACE1000401//ESTs//1.4e-16:212:72//Hs.151665:AA020959  
R-PLACE1000406//ESTs//2.1e-51:259:97//Hs.129651:N53089  
R-PLACE1000420//ESTs//7.7e-92:471:95//Hs.144407:AA737799

R-PLACE1000421//ESTs//2.9e-14:282:67//Hs.142068:AA176125  
R-PLACE1000424//EST//2.9e-35:453:70//Hs.162404:AA573131  
R-PLACE1000435//Homo sapiens protein phosphatase with EF-hands-2 long form (PPEF-2) mRNA, complete cds//1.6e-47:472:77//Hs.113259:AF023456  
R-PLACE1000444//ESTs, Moderately similar to platelet glycoprotein IIb precursor [H.sapiens]//2.0e-58:410:81//Hs.97579:AA398118  
R-PLACE1000453//ESTs//2.3e-85:442:95//Hs.9725:AA039793  
R-PLACE1000481//ESTs, Weakly similar to Ndr protein kinase [H.sapiens]//3.2e-109:549:95//Hs.19074:U69566  
R-PLACE1000492//ESTs, Highly similar to vacuolar protein sorting homolog r-vps33b [R.norvegicus]//3.5e-83:435:94//Hs.26510:AA700425  
R-PLACE1000540//ESTs//3.2e-58:281:99//Hs.118270:AA844729  
R-PLACE1000547//Homo sapiens mRNA for KIAA0640 protein, partial cds//2.2e-32:208:88//Hs.153026:AB014540  
R-PLACE1000562//ESTs, Weakly similar to HYPOTHETICAL 23.0 KD PROTEIN IN IXR1-TFA1 INTERGENIC REGION [Saccharomyces cerevisiae]//1.9e-26:220:81//Hs.163791:W25348  
R-PLACE1000564//ESTs//1.1e-54:302:92//Hs.158520:AI380485  
R-PLACE1000583//Human mRNA for KIAA0355 gene, complete cds//5.5e-43:404:75//Hs.153014:AB002353  
R-PLACE1000588//Guanylate binding protein 1, interferon-inducible, 67kD//6.1e-79:542:82//Hs.62661:M55542  
R-PLACE1000596//ESTs//0.0028:364:59//Hs.106090:AA457030  
R-PLACE1000599//Human mRNA for KIAA0118 gene, partial cds//4.3e-49:295:90//Hs.154326:D42087  
R-PLACE1000610//ESTs//0.0010:104:74//Hs.17413:N45301  
R-PLACE1000636//ESTs//1.8e-64:340:95//Hs.100895:AA479308  
R-PLACE1000653//Homo sapiens N-acetylglucosamine-phosphate mutase mRNA, complete cds//5.3e-101:506:96//Hs.5819:AF102265

R-PLACE1000656//Homo sapiens mRNA for JM4 protein, complete CDS (clone I  
MAGE 546750 and LLNLc110F1857Q7 (RZPD Berlin))//1.4e-102:559:92//Hs.2959  
5:AJ005896

R-PLACE1000706//Homo sapiens transcription intermediary factor 1 (TIF1)  
mRNA, complete cds//2.8e-10:281:64//Hs.128763:AF009353

R-PLACE1000712//ESTs//7.8e-60:317:95//Hs.8245:AA115485

R-PLACE1000716

R-PLACE1000748//ESTs//8.9e-87:466:93//Hs.25245:AA176701

R-PLACE1000749//EST//0.019:186:61//Hs.135443:AI077396

R-PLACE1000755//ESTs, Weakly similar to HYPOTHETICAL HELICASE K12H4.8 IN  
CHROMOSOME III [C.elegans]//3.9e-40:224:94//Hs.87889:AA262008

R-PLACE1000769//Homo sapiens clone 24566 mRNA sequence//6.5e-27:531:66//  
Hs.133342:AF070536

R-PLACE1000785//Homo sapiens mRNA for KIAA0648 protein, partial cds//8.5  
e-103:513:96//Hs.31921:AB014548

R-PLACE1000786//ESTs//5.2e-93:449:97//Hs.58389:W74482

R-PLACE1000793//H.sapiens mRNA for chemokine HCC-1//0.88:201:60//Hs.2014  
4:AF088219

R-PLACE1000798//ESTs//1.1e-97:508:94//Hs.139119:N32189

R-PLACE1000841//ESTs, Highly similar to guanine nucleotide regulatory pr  
otein [H.sapiens]//7.7e-31:220:86//Hs.117576:R33135

R-PLACE1000849//ESTs//1.8e-87:459:94//Hs.43100:AA186588

R-PLACE1000856//ESTs//0.0084:224:59//Hs.145906:AI275039

R-PLACE1000863//ESTs, Highly similar to PUTATIVE 40S RIBOSOMAL PROTEIN  
YHR148W [Saccharomyces cerevisiae]//2.2e-92:467:95//Hs.6118:AI141558

R-PLACE1000909//ESTs//4.7e-89:435:97//Hs.95744:AI392846

R-PLACE1000931//EST//1.9e-28:261:73//Hs.135545:AI097091

R-PLACE1000948//ESTs//0.034:329:58//Hs.114851:AA608697

R-PLACE1000972//EST//3.3e-24:264:74//Hs.130321:AI002941

R-PLACE1000977//EST//0.085:153:65//Hs.131646:AI025689  
 R-PLACE1000979  
 R-PLACE1001000//ESTs//4.7e-56:284:96//Hs.117978:AA810725  
 R-PLACE1001007//ESTs, Moderately similar to MNK1 [H.sapiens]//5.2e-63:34  
 3:93//Hs.5662:AA868361  
 R-PLACE1001010//EST//0.96:53:71//Hs.96973:AA351146  
 R-PLACE1001015//Oxytocin receptor//2.8e-25:308:71//Hs.2820:X64878  
 R-PLACE1001024//ESTs//5.0e-12:79:96//Hs.97910:AA404736  
 R-PLACE1001036//ESTs//4.0e-15:301:65//Hs.137947:AI025762  
 R-PLACE1001062//ESTs//5.2e-15:199:73//Hs.138982:AA056120  
 R-PLACE1001076//ESTs//3.9e-84:406:98//Hs.115455:AA678124  
 R-PLACE1001088//ESTs//3.0e-106:518:97//Hs.158964:AA639580  
 R-PLACE1001092//Homo sapiens SEC63 (SEC63) mRNA, complete cds//0.035:259  
 :59//Hs.31575:AF100141  
 R-PLACE1001104//ESTs//6.1e-115:582:95//Hs.10972:AA164268  
 R-PLACE1001118//ESTs//6.9e-81:440:93//Hs.5383:AA913610  
 R-PLACE1001136//ESTs//7.4e-41:168:83//Hs.95115:AA206594  
 R-PLACE1001168//ESTs//3.9e-21:116:99//Hs.5897:AA148834  
 R-PLACE1001171//ESTs, Highly similar to CYTOCHROME B-245 LIGHT CHAIN [H.  
 sapiens]//0.91:77:71//Hs.115211:AA287527  
 R-PLACE1001185//ESTs//1.5e-65:330:96//Hs.26368:AA789297  
 R-PLACE1001238//ESTs, Moderately similar to RNA polymerase I associated  
 factor [M.musculus]//1.9e-99:512:94//Hs.24884:AA176812  
 R-PLACE1001241//ESTs//1.1e-81:446:93//Hs.42278:AI073464  
 R-PLACE1001257//EST//6.4e-46:298:87//Hs.162404:AA573131  
 R-PLACE1001272//ESTs//0.31:158:61//Hs.42960:N95371  
 R-PLACE1001279//ESTs//1.8e-77:376:97//Hs.29276:AA427780  
 R-PLACE1001280//ESTs//1.1e-30:134:89//Hs.163492:AI334460  
 R-PLACE1001294//ESTs, Moderately similar to GAMETOGENESIS EXPRESSED PROT

EIN GEG-154 [M.musculus] //2.7e-22:181:84//Hs.48320:AA149548  
R-PLACE1001304//ESTs, Weakly similar to ZINC FINGER PROTEIN 135 [H.sapie  
ns] //4.2e-34:195:92//Hs.86276:W27601  
R-PLACE1001311//ESTs//9.1e-91:438:97//Hs.41055:AI339056  
R-PLACE1001323//Human transmembrane 4 superfamily protein (SAS) mRNA, co  
mplete cds//5.5e-44:215:86//Hs.50984:U01160  
R-PLACE1001351//ESTs//2.4e-101:494:97//Hs.23944:AI097077  
R-PLACE1001366//Small inducible cytokine A5 (RANTES)//8.7e-43:284:85//Hs  
.155464:AF088219  
R-PLACE1001377//Homo sapiens ADAM10 (ADAM10) mRNA, complete cds//2.3e-81  
:431:93//Hs.152005:AF009615  
R-PLACE1001383//Homo sapiens clone 24538 mRNA sequence//1.0e-36:192:97//  
Hs.12342:AF055030  
R-PLACE1001384//Homo sapiens multi PDZ domain protein MUPP1 (MUPP1) mRNA  
, complete cds//1.0e-86:456:94//Hs.21301:AF093419  
R-PLACE1001387//ESTs//6.0e-74:383:94//Hs.55016:AI298280  
R-PLACE1001395//ESTs//2.3e-94:473:95//Hs.22394:N32555  
R-PLACE1001399//ESTs//2.6e-41:204:100//Hs.24462:N36348  
R-PLACE1001412//Homo sapiens clone 643 unknown mRNA, complete sequence//  
2.6e-45:242:95//Hs.110404:AF091087  
R-PLACE1001414//ESTs//0.0013:77:75//Hs.144614:AA291800  
R-PLACE1001440  
R-PLACE1001456//EST//0.76:120:62//Hs.34011:H48115  
R-PLACE1001468//ESTs//4.0e-80:403:96//Hs.131832:AI017547  
R-PLACE1001484//ESTs//3.0e-16:201:72//Hs.153413:AI248625  
R-PLACE1001502//ESTs//8.1e-31:161:99//Hs.126264:AA455617  
R-PLACE1001503//ESTs//2.4e-37:176:81//Hs.141581:AA315361  
R-PLACE1001517//Homo sapiens hGAA1 mRNA, complete cds//2.1e-57:339:90//H  
s.4742:AB006969

R-PLACE1001534//ESTs//3.6e-61:304:97//Hs.45207:AI042153  
 R-PLACE1001545//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT  
 RY !!!! [H.sapiens]//1.6e-22:170:85//Hs.155456:AA707265  
 R-PLACE1001551//ESTs//1.5e-39:202:98//Hs.139269:AA894431  
 R-PLACE1001570//EST//1.1e-70:495:82//Hs.144234:W52249  
 R-PLACE1001602//EST//0.33:297:57//Hs.149839:AI287601  
 R-PLACE1001603//ESTs//2.0e-17:181:76//Hs.155334:AA827904  
 R-PLACE1001610//EST//1.1e-86:442:95//Hs.112580:AA608683  
 R-PLACE1001611//Homo sapiens histone macroH2A1.2 mRNA, complete cds//1.1  
 e-42:217:97//Hs.75258:AF054174  
 R-PLACE1001632//ESTs, Highly similar to ZINC FINGER PROTEIN 91 [Homo sa  
 piens]//1.5e-78:458:91//Hs.114547:AA167095  
 R-PLACE1001634//ESTs//0.0035:40:97//Hs.101577:AI168526  
 R-PLACE1001640//ESTs//0.0028:377:57//Hs.131044:D61640  
 R-PLACE1001672//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING  
 ENTRY !!!! [H.sapiens]//0.98:141:62//Hs.153060:AA195804  
 R-PLACE1001691//Homo sapiens okadaic acid-inducible phosphoprotein (OA48  
 -18) mRNA, complete cds//4.7e-113:545:97//Hs.3688:AF069250  
 R-PLACE1001692//EST//3.0e-43:430:75//Hs.162975:AA679124  
 R-PLACE1001705//ESTs//3.0e-81:418:94//Hs.22646:AI374903  
 R-PLACE1001716//EST//0.76:150:62//Hs.128906:AA983667  
 R-PLACE1001720//ESTs//2.4e-64:385:90//Hs.60455:AA010993  
 R-PLACE1001729//ESTs//2.9e-84:418:96//Hs.134740:AA282171  
 R-PLACE1001739//ESTs, Weakly similar to P68 PROTEIN [H.sapiens]//9.1e-32  
 :206:89//Hs.6366:AA614113  
 R-PLACE1001740//EST//6.5e-05:113:68//Hs.139949:AA644266  
 R-PLACE1001745//ESTs//3.3e-92:473:95//Hs.104270:AA236479  
 R-PLACE1001746//ESTs//8.8e-93:443:98//Hs.112198:AI423937  
 R-PLACE1001748//Homo sapiens metalloprotease 1 (MP1) mRNA, complete cds/

/4.1e-93:540:89//Hs.4812:AF061243  
 R-PLACE1001756//ESTs//0.17:157:66//Hs.141565:N64662  
 R-PLACE1001761  
 R-PLACE1001771//ESTs//0.92:165:62//Hs.47387:N51980  
 R-PLACE1001781//ESTs//5.7e-84:437:95//Hs.23363:AA081236  
 R-PLACE1001799//EST//0.00039:126:65//Hs.123267:AA807352  
 R-PLACE1001817//Homo sapiens ATP-specific succinyl-CoA synthetase beta s  
 ubunit (SCS) mRNA, partial cds//1.3e-93:463:95//Hs.40820:AF058953  
 R-PLACE1001821//Small inducible cytokine A5 (RANTES)//2.7e-35:328:75//Hs  
 .155464:AF088219  
 R-PLACE1001845  
 R-PLACE1001869//EST//1.0:207:62//Hs.137298:W32868  
 R-PLACE1001897//ESTs//2.4e-23:219:80//Hs.7503:H50009  
 R-PLACE1001912//ESTs//1.5e-32:162:78//Hs.136810:AA789098  
 R-PLACE1001920//Homo sapiens TNF-induced protein GG2-1 mRNA, complete cd  
 s//3.9e-74:363:97//Hs.17839:AF099936  
 R-PLACE1001928//Homo sapiens mRNA for KIAA0623 protein, complete cds//0.  
 85:130:66//Hs.151406:AB014523  
 R-PLACE1001983//ESTs//2.8e-66:334:96//Hs.110155:AA007313  
 R-PLACE1001989//ESTs//1.3e-88:453:95//Hs.132717:AA171941  
 R-PLACE1002046  
 R-PLACE1002052//ESTs//1.7e-79:428:94//Hs.6737:N32595  
 R-PLACE1002066//ESTs//2.8e-82:427:94//Hs.132972:AA543094  
 R-PLACE1002072//ESTs//0.27:108:66//Hs.123163:AA809619  
 R-PLACE1002073//EST//5.5e-70:369:95//Hs.132339:AI028552  
 R-PLACE1002090//ESTs//6.3e-73:361:96//Hs.134469:AA731632  
 R-PLACE1002115//ESTs//4.6e-34:233:88//Hs.163443:R23311  
 R-PLACE1002119//ESTs//1.2e-88:444:96//Hs.15725:AA521293  
 R-PLACE1002140//ESTs//6.6e-22:118:100//Hs.22793:W91937



R-PLACE1002150//ESTs//4.0e-96:465:98//Hs.7312:AI167614  
R-PLACE1002157//EST, Weakly similar to LINE-1 REVERSE TRANSCRIPTASE HOMO  
LOG [H.sapiens] //3.6e-39:400:76//Hs.162172:AA534189  
R-PLACE1002163//ESTs//3.2e-83:428:95//Hs.137011:AI185965  
R-PLACE1002171//ESTs//5.3e-68:392:90//Hs.62273:AA143745  
R-PLACE1002205//ESTs//1.5e-39:211:95//Hs.28338:N48793  
R-PLACE1002213//ESTs//5.1e-38:290:83//Hs.146811:AA410788  
R-PLACE1002227//EST//1.3e-14:214:72//Hs.46979:N49892  
R-PLACE1002256//ESTs//2.4e-100:484:98//Hs.9343:AI004257  
R-PLACE1002259//Human Line-1 repeat mRNA with 2 open reading frames//5.8  
e-67:501:81//Hs.23094:M19503  
R-PLACE1002319//ESTs//1.4e-28:178:92//Hs.7353:AA209308  
R-PLACE1002342//Homo sapiens mRNA for KIAA0728 protein, partial cds//1.6  
e-95:501:93//Hs.18277:AB018271  
R-PLACE1002395//ESTs//3.6e-25:248:77//Hs.3853:AA034291  
R-PLACE1002399//ESTs//1.5e-27:238:78//Hs.13014:W26381  
R-PLACE1002433//ESTs//4.3e-108:511:98//Hs.98324:AA621959  
R-PLACE1002437//EST//1.2e-06:158:61//Hs.159833:T24110  
R-PLACE1002438//Sjogren syndrome antigen B (autoantigen La)//0.93:176:60  
//Hs.83715:X69804  
R-PLACE1002450//ESTs//1.5e-89:432:98//Hs.47371:AA136333  
R-PLACE1002465//ESTs//1.6e-92:488:93//Hs.78110:AA741320  
R-PLACE1002474//Human matrilin-2 precursor mRNA, partial cds//4.9e-23:16  
6:85//Hs.19368:U69263  
R-PLACE1002477//ESTs//2.5e-62:305:98//Hs.88605:AA421132  
R-PLACE1002493//Homo sapiens signal transducing adaptor molecule 2A (STA  
M2) mRNA, complete cds//3.6e-55:307:91//Hs.17200:AF042273  
R-PLACE1002499//ESTs//7.4e-72:373:96//Hs.128221:AA972429  
R-PLACE1002500//Homo sapiens KIAA0409 mRNA, partial cds//1.2e-40:296:83/

/Hs.5158:AB007869

R-PLACE1002514//ESTs, Weakly similar to !!!! ALU SUBFAMILY SB1 WARNING E  
NTRY !!!! [H.sapiens]//6.4e-14:217:69//Hs.152230:AI140609

R-PLACE1002529//Homo sapiens mRNA for KIAA0713 protein, partial cds//5.1  
e-88:582:85//Hs.88756:AB018256

R-PLACE1002532//Homo sapiens BAC clone RG300E22 from 7q21-q31.1//2.7e-19  
:116:93//Hs.99348:AC004774

R-PLACE1002537//ESTs//4.8e-93:440:99//Hs.164005:AA766491

R-PLACE1002571//ESTs, Highly similar to ACTIN-LIKE PROTEIN 13E [Drosoph  
ila melanogaster]//1.3e-108:555:95//Hs.23259:AA532437

R-PLACE1002578//EST//1.9e-40:337:81//Hs.162404:AA573131

R-PLACE1002583//EST//1.2e-07:264:65//Hs.156414:AI339738

R-PLACE1002591//ESTs//2.3e-67:372:94//Hs.143046:N73778

R-PLACE1002598//ESTs, Highly similar to PROTEIN HI1715 [Haemophilus inf  
luenzae]//1.2e-44:228:97//Hs.7527:AA843208

R-PLACE1002604//ESTs//3.3e-106:532:96//Hs.86828:AA632147

R-PLACE1002625//EST//3.8e-13:173:74//Hs.138597:H77749

R-PLACE1002665//Small inducible cytokine A4 (homologous to mouse Mip-1b)  
//1.0:189:58//Hs.75703:J04130

R-PLACE1002685//Homo sapiens B cell linker protein BLNK mRNA, alternativ  
ely spliced, complete cds//3.8e-79:390:97//Hs.124903:AF068180

R-PLACE1002714//ESTs//8.2e-63:340:93//Hs.7973:H19830

R-PLACE1002722//ESTs, Weakly similar to putative G-protein-coupled recep  
tor [H.sapiens]//6.8e-75:445:90//Hs.29202:R71586

R-PLACE1002768//ESTs//1.2e-70:359:95//Hs.132600:H12865

R-PLACE1002772//ESTs//8.1e-49:362:82//Hs.141254:AI334099

R-PLACE1002782//ESTs//2.4e-58:284:98//Hs.143545:AI149014

R-PLACE1002794//ESTs//5.4e-21:114:100//Hs.77365:W93593

R-PLACE1002811//ESTs//6.7e-68:329:98//Hs.78026:AA456955

R-PLACE1002815//ESTs//6.8e-103:537:93//Hs.5459:AI304392  
R-PLACE1002816//ESTs//3.9e-05:118:68//Hs.98641:AA429916  
R-PLACE1002834//ESTs, Highly similar to ZINC FINGER PROTEIN 91 [Homo sapiens] //2.1e-42:233:94//Hs.61518:AA167094  
R-PLACE1002839//ESTs//1.7e-10:292:64//Hs.93012:R96142  
R-PLACE1002851//ESTs//1.7e-73:381:95//Hs.135021:AI096756  
R-PLACE1002853//ESTs//1.2e-89:453:96//Hs.23630:N57539  
R-PLACE1002881//ESTs//1.1e-71:360:96//Hs.34392:AI066762  
R-PLACE1002908//EST//2.7e-31:177:94//Hs.147925:AI249332  
R-PLACE1002941//ESTs//4.0e-96:519:92//Hs.125139:AA523995  
R-PLACE1002962  
R-PLACE1002968//ESTs//4.7e-31:420:69//Hs.116518:AA653202  
R-PLACE1002991//ESTs//9.0e-81:418:95//Hs.132717:AA171941  
R-PLACE1002993//ESTs, Weakly similar to !!!! ALU SUBFAMILY SB WARNING ENTRY !!!! [H.sapiens] //1.3e-86:502:89//Hs.32232:AA604268  
R-PLACE1002996//ESTs//1.9e-44:218:100//Hs.63657:AI144268  
R-PLACE1003025//ESTs//8.4e-104:517:96//Hs.10711:AI151499  
R-PLACE1003027//Human mRNA for KIAA0238 gene, partial cds//0.97:156:60//Hs.82042:D87075  
R-PLACE1003044//Human onconeural ventral antigen-1 (Nova-1) mRNA, complete cds//1.0:200:63//Hs.214:U04840  
R-PLACE1003092//ESTs//0.0046:267:60//Hs.133095:AA927777  
R-PLACE1003100//ESTs, Highly similar to NODULATION PROTEIN G [Rhizobium meliloti] //9.5e-94:491:93//Hs.6318:AI131178  
R-PLACE1003108//ESTs//0.00065:184:66//Hs.154366:AA527359  
R-PLACE1003136//Signal recognition particle 54 kD protein//0.057:317:59//Hs.49346:U51920  
R-PLACE1003145//ESTs//1.9e-98:534:92//Hs.61929:AA044757  
R-PLACE1003153//ESTs//5.8e-76:367:98//Hs.105196:AA483467

R-PLACE1003174//ESTs//1.7e-44:226:98//Hs.59688:AA453924  
R-PLACE1003176  
R-PLACE1003190//ESTs//1.6e-74:356:99//Hs.121282:AI091453  
R-PLACE1003200//ESTs//4.6e-93:461:96//Hs.24321:AA971017  
R-PLACE1003205//ESTs//0.037:171:61//Hs.157077:H44802  
R-PLACE1003238//ESTs, Weakly similar to KIAA0001 [H.sapiens] //2.5e-82:43  
6:94//Hs.58561:W79123  
R-PLACE1003249//Human high-affinity copper uptake protein (hCTR1) mRNA,  
complete cds//7.9e-44:313:84//Hs.73614:U83460  
R-PLACE1003256//EST//9.6e-46:284:88//Hs.162404:AA573131  
R-PLACE1003258//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT  
RY !!!! [H.sapiens] //8.3e-102:551:92//Hs.52431:AA625326  
R-PLACE1003296//ESTs//1.9e-88:451:96//Hs.57749:W92986  
R-PLACE1003302//ESTs, Highly similar to ZINC FINGER PROTEIN 43 [Homo sa  
piens] //8.2e-93:458:96//Hs.29147:AA883993  
R-PLACE1003334//ESTs, Weakly similar to !!!! ALU CLASS B WARNING ENTRY !  
!!! [H.sapiens] //3.3e-94:463:97//Hs.155050:AA908765  
R-PLACE1003342//ESTs//6.0e-88:447:96//Hs.107527:R66438  
R-PLACE1003343//EST//0.0087:412:58//Hs.159963:AA977701  
R-PLACE1003353//Homo sapiens breast cancer antiestrogen resistance 3 pro  
tein (BCAR3) mRNA, complete cds//1.1e-99:469:98//Hs.6564:U92715  
R-PLACE1003361//ESTs//3.5e-64:332:95//Hs.163861:AI199636  
R-PLACE1003366//ESTs//1.0e-87:492:92//Hs.72222:AA158234  
R-PLACE1003369//ESTs, Weakly similar to ZK1058.4 [C.elegans] //3.5e-18:10  
9:95//Hs.27670:AI051591  
R-PLACE1003373//Homo sapiens mRNA for KIAA0472 protein, partial cds//2.6  
e-54:279:80//Hs.6874:AB007941  
R-PLACE1003375//ESTs//1.7e-88:431:97//Hs.41327:AI039909  
R-PLACE1003383//ESTs//0.00084:177:64//Hs.120695:AI377755

R-PLACE1003401//ESTs//1.1e-16:147:80//Hs.132187:AI039020  
 R-PLACE1003420//ESTs//1.4e-93:481:94//Hs.122565:AI126840  
 R-PLACE1003454//ESTs//4.0e-57:310:93//Hs.121688:AA743697  
 R-PLACE1003478//EST//1.0:162:63//Hs.147003:AI184671  
 R-PLACE1003493//ESTs//1.2e-73:383:95//Hs.28852:R64270  
 R-PLACE1003516//ESTs//3.2e-23:206:80//Hs.138632:H97952  
 R-PLACE1003519//H.sapiens hnRNP-E1 mRNA//1.7e-22:236:79//Hs.2853:Z29505  
 R-PLACE1003521//ESTs//5.8e-74:371:96//Hs.30818:AA194980  
 R-PLACE1003528//ESTs//1.1e-40:219:82//Hs.138856:H47461  
 R-PLACE1003537//ESTs, Weakly similar to multispanning membrane protein [H.sapiens] //7.4e-69:338:98//Hs.110439:N93209  
 R-PLACE1003553//ESTs//2.2e-87:438:97//Hs.132022:AI040321  
 R-PLACE1003566//ESTs//1.2e-62:298:92//Hs.30799:AI052591  
 R-PLACE1003575//Homo sapiens mRNA, chromosome 1 specific transcript KIAA0487//2.4e-22:145:80//Hs.92381:AB007956  
 R-PLACE1003583//ESTs, Weakly similar to hypothetical L1 protein [H.sapiens] //1.5e-14:264:65//Hs.158253:R86178  
 R-PLACE1003584  
 R-PLACE1003592//ESTs//1.3e-15:213:69//Hs.139507:T77542  
 R-PLACE1003593//ESTs, Highly similar to FRG1 gene product [H.sapiens] //5.8e-75:459:89//Hs.23884:AI377106  
 R-PLACE1003596//ESTs//0.011:273:61//Hs.71719:AA142875  
 R-PLACE1003602//Homo sapiens mRNA expressed in placenta//7.8e-97:576:88//Hs.56851:D83200  
 R-PLACE1003605//ESTs//3.7e-86:407:99//Hs.136057:AA988299  
 R-PLACE1003611//ESTs//1.0:78:71//Hs.101248:T26446  
 R-PLACE1003618//ESTs//6.8e-30:281:79//Hs.114455:AA411943  
 R-PLACE1003625//ESTs//7.2e-78:377:98//Hs.102708:AA292285  
 R-PLACE1003638//ESTs//6.7e-38:274:82//Hs.138852:AA284247

R-PLACE1003669//ESTs//9.7e-83:418:95//Hs.4842:AI342607  
 R-PLACE1003704//ESTs//3.0e-13:99:89//Hs.81648:W26521  
 R-PLACE1003709//ESTs//0.019:178:60//Hs.32100:N59866  
 R-PLACE1003711//ESTs//0.99:126:63//Hs.47005:N98639  
 R-PLACE1003723//ESTs//1.7e-89:448:96//Hs.157222:AA766987  
 R-PLACE1003738//ESTs//2.5e-36:182:100//Hs.122162:AI057087  
 R-PLACE1003760//Human globin gene//1.9e-98:538:91//Hs.100090:M69023  
 R-PLACE1003762//EST//2.9e-15:125:85//Hs.162083:AA487512  
 R-PLACE1003768//Human P042 gene, complete cds//3.1e-18:300:69//Hs.158302  
 :U88965  
 R-PLACE1003771//ESTs//1.2e-09:64:100//Hs.23799:AI003798  
 R-PLACE1003783//ESTs, Weakly similar to D2085.5 [C.elegans] //3.8e-38:199  
 :97//Hs.115197:AA215757  
 R-PLACE1003784//ESTs//3.7e-87:428:97//Hs.157985:AI366909  
 R-PLACE1003795//Homo sapiens mRNA for KIAA0575 protein, complete cds//3.  
 2e-36:236:88//Hs.153468:AB011147  
 R-PLACE1003833//ESTs, Moderately similar to !!!! ALU SUBFAMILY SC WARNIN  
 G ENTRY !!!! [H.sapiens] //8.5e-62:313:96//Hs.121020:AA526092  
 R-PLACE1003850//ESTs//4.0e-67:351:96//Hs.159303:T91059  
 R-PLACE1003858//ESTs//0.96:87:66//Hs.107112:AA679058  
 R-PLACE1003864  
 R-PLACE1003870//EST//2.9e-34:281:79//Hs.160895:AI365871  
 R-PLACE1003885  
 R-PLACE1003886//ESTs//6.7e-85:410:97//Hs.25129:W93595  
 R-PLACE1003888//ESTs//0.0085:165:64//Hs.96739:AA441915  
 R-PLACE1003900//EST//2.4e-05:129:69//Hs.127931:AA969259  
 R-PLACE1003903//ESTs, Highly similar to CTP SYNTHASE [Homo sapiens] //1.  
 5e-54:282:96//Hs.58553:AA100804  
 R-PLACE1003915//EST//0.87:55:76//Hs.145930:AI275760

R-PLACE1003923//ESTs//1.7e-89:456:95//Hs.14125:AA156236  
 R-PLACE1003932//ESTs//3.0e-50:340:84//Hs.151208:AI126110  
 R-PLACE1003936//EST//1.8e-08:208:65//Hs.162656:AA603567  
 R-PLACE1003968//ESTs//7.4e-49:301:90//Hs.93850:AA115330  
 R-PLACE1004104//ESTs//1.9e-46:254:94//Hs.96802:AA443231  
 R-PLACE1004114//ESTs//1.2e-64:322:97//Hs.28928:AI052052  
 R-PLACE1004118//ESTs//1.0e-83:404:98//Hs.112764:AA609770  
 R-PLACE1004128//ESTs//5.3e-80:415:95//Hs.11835:AA040244  
 R-PLACE1004149//ESTs//7.2e-25:331:72//Hs.141084:H11714  
 R-PLACE1004156//Homo sapiens PYRIN (MEFV) mRNA, complete cds//2.0e-56:49  
 1:76//Hs.113283:AF018080  
 R-PLACE1004161//ESTs//2.0e-59:355:88//Hs.13830:AA918601  
 R-PLACE1004183//Homo sapiens cytochrome c oxidase assembly protein COX11  
 (COX11) mRNA, complete cds//4.7e-78:434:91//Hs.153504:AF044321  
 R-PLACE1004197  
 R-PLACE1004203//Homo sapiens GPI-anchored membrane protein CDw108 precursor,  
 mRNA, complete cds//1.5e-105:501:98//Hs.24640:AF069493  
 R-PLACE1004242//ESTs//1.0e-71:364:87//Hs.138632:H97952  
 R-PLACE1004256//EST//0.0011:347:61//Hs.131385:AI022630  
 R-PLACE1004257//EST//0.027:99:71//Hs.97587:AA398209  
 R-PLACE1004258//KERATIN, TYPE I CYTOSKELETAL 14//0.72:180:63//Hs.117729:  
 J00124  
 R-PLACE1004270//ESTs//0.011:264:59//Hs.110044:AA181800  
 R-PLACE1004274//Human retinoic acid receptor-beta associated open reading  
 frame, complete sequence//0.28:121:66//Hs.1938:S82362  
 R-PLACE1004277//Homo sapiens two pore domain K+ channel (TASK-2) mRNA, c  
 omplete cds//1.4e-107:581:91//Hs.127007:AF084830  
 R-PLACE1004284//ESTs//5.0e-22:187:82//Hs.23141:W92114  
 R-PLACE1004289//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT

RY !!!! [H.sapiens] //2.9e-28:279:77//Hs.38687:AA744496  
R-PLACE1004302//ESTs, Weakly similar to SOF1 PROTEIN [Saccharomyces cerevisiae] //8.2e-61:313:95//Hs.71435:AI253099  
R-PLACE1004316//H.sapiens mRNA for apoptosis specific protein//6.0e-115:590:94//Hs.11171:Y11588  
R-PLACE1004336//Cytochrome P450, subfamily I (aromatic compound-inducible), polypeptide 2//6.7e-69:572:77//Hs.1361:M55053  
R-PLACE1004358//Homo sapiens connector enhancer of KSR-like protein CNK1 mRNA, complete cds//7.7e-72:379:93//Hs.16232:AF100153  
R-PLACE1004376//ESTs//0.49:362:59//Hs.138086:AI056309  
R-PLACE1004384//EST//1.0:47:76//Hs.128546:AA905556  
R-PLACE1004388//ESTs, Weakly similar to contains similarity to ATP/GTP-binding site motif [C.elegans] //1.3e-98:572:90//Hs.14202:N46000.  
R-PLACE1004405//ESTs//3.4e-99:507:95//Hs.28792:AI343467  
R-PLACE1004425//ESTs//2.7e-85:442:95//Hs.12544:N53665  
R-PLACE1004428//ESTs//1.0e-07:114:78//Hs.140225:AA704101  
R-PLACE1004437//Human NAD+-specific isocitrate dehydrogenase beta subunit precursor, mRNA, nuclear gene encoding mitochondrial protein, complete cds//9.4e-90:516:88//Hs.155410:U49283  
R-PLACE1004451  
R-PLACE1004460//ESTs//5.4e-14:338:64//Hs.97464:AA662980  
R-PLACE1004467//ESTs//3.3e-85:467:92//Hs.9527:W52721  
R-PLACE1004471//ESTs//3.0e-73:389:94//Hs.23240:R46578  
R-PLACE1004473//ESTs, Weakly similar to F20D1.2 [C.elegans] //3.8e-101:510:95//Hs.16986:W89194  
R-PLACE1004491//Human mitochondrial 1,25-dihydroxyvitamin D3 24-hydroxylase mRNA, complete cds//0.23:278:61//Hs.89663:L13286  
R-PLACE1004506//ESTs//2.5e-98:559:90//Hs.19447:AI057117  
R-PLACE1004510//ESTs//1.5e-91:436:98//Hs.24846:AI420493



R-PLACE1004516//EST//1.7e-66:344:96//Hs.99303:AA453164  
 R-PLACE1004518//ESTs//5.2e-79:410:94//Hs.27091:AA436553  
 R-PLACE1004548//Homo sapiens mRNA for small GTP-binding protein, complete cds//1.8e-40:332:72//Hs.115325:D84488  
 R-PLACE1004550  
 R-PLACE1004564//ESTs//5.5e-76:367:98//Hs.49683:AA564742  
 R-PLACE1004629//ESTs, Weakly similar to OS-9 precursor [H.sapiens]//8.1e-40:272:87//Hs.7100:W07181  
 R-PLACE1004645//ESTs//6.3e-14:83:100//Hs.17270:AA701903  
 R-PLACE1004646//ESTs//3.7e-22:231:76//Hs.141250:N29734  
 R-PLACE1004658//ESTs//2.0e-12:109:84//Hs.23508:AA101113  
 R-PLACE1004664//Homo sapiens mRNA for KIAA0714 protein, partial cds//7.8e-23:129:99//Hs.123129:AB018257  
 R-PLACE1004672//ESTs//2.0e-50:256:98//Hs.136367:AI144254  
 R-PLACE1004674//Homo sapiens calcium binding protein (ALG-2) mRNA, complete cds//1.8e-90:510:91//Hs.80019:AF035606  
 R-PLACE1004681//EST//2.1e-08:283:62//Hs.99543:AA461482  
 R-PLACE1004686  
 R-PLACE1004691//EST//7.3e-42:305:82//Hs.141833:AA021552  
 R-PLACE1004693//ESTs//0.014:135:64//Hs.145333:AI251374  
 R-PLACE1004716//ESTs, Weakly similar to No definition line found [C.elegans]//3.4e-80:413:94//Hs.23528:AI279571  
 R-PLACE1004722//EST//0.14:165:63//Hs.18213:T97997  
 R-PLACE1004736//ESTs//1.0e-72:385:94//Hs.10657:N63911  
 R-PLACE1004740//ESTs//1.0:267:58//Hs.101661:AA416619  
 R-PLACE1004743//EST//0.45:94:69//Hs.147174:AI192195  
 R-PLACE1004751//EST//9.8e-32:174:83//Hs.147901:AI223374  
 R-PLACE1004773//Homo sapiens inversin protein mRNA, complete cds//2.7e-89:437:96//Hs.104715:AF084367

R-PLACE1004777//ESTs//7.4e-68:351:94//Hs.23395:AA398548  
R-PLACE1004793//ESTs//1.3e-53:290:78//Hs.142375:AA398619  
R-PLACE1004804//Homo sapiens mRNA for KIAA0606 protein, partial cds//1.9e-99:580:88//Hs.38176:AB011178  
R-PLACE1004813//ESTs//7.6e-86:433:96//Hs.85640:AA535856  
R-PLACE1004814//Homo sapiens okadaic acid-inducible phosphoprotein (OA48-18) mRNA, complete cds//1.1e-108:358:99//Hs.3688:AF069250  
R-PLACE1004815//EST//4.7e-50:333:84//Hs.142196:AA258356  
R-PLACE1004824//Protein kinase, interferon-inducible double stranded RNA dependent//4.8e-46:450:76//Hs.73821:M35663  
R-PLACE1004827//ESTs//2.3e-48:250:96//Hs.138766:AA342185  
R-PLACE1004836//ESTs//2.7e-39:222:94//Hs.78661:AA195299  
R-PLACE1004838//EST//0.056:198:60//Hs.129589:AA995901  
R-PLACE1004840//ESTs, Highly similar to TRANSCRIPTIONAL ACTIVATOR GCN5 [Saccharomyces cerevisiae]//6.5e-71:381:93//Hs.8383:AA013272  
R-PLACE1004868//ESTs//4.9e-70:367:94//Hs.100895:AA479308  
R-PLACE1004885//Homo sapiens protein phosphatase with EF-hands-2 long form (PPEF-2) mRNA, complete cds//1.8e-37:330:78//Hs.113259:AF023456  
R-PLACE1004900//EST//1.2e-46:306:86//Hs.149580:AI281881  
R-PLACE1004902//Sucrase-isomaltase//0.87:254:61//Hs.2996:X63597  
R-PLACE1004913//ESTs//4.5e-75:375:96//Hs.91115:AI221563  
R-PLACE1004918//ESTs//2.6e-103:519:95//Hs.143607:AI424948  
R-PLACE1004930//Homo sapiens TNF-induced protein GG2-1 mRNA, complete cds//6.6e-102:532:93//Hs.17839:AF099936  
R-PLACE1004934//EST//0.035:156:67//Hs.162071:AA478980  
R-PLACE1004937//ESTs, Weakly similar to F55B12.3 [C.elegans]//6.4e-80:409:95//Hs.31945:AA702166  
R-PLACE1004969//ESTs//9.8e-18:101:99//Hs.112837:N78013  
R-PLACE1004972//ESTs//1.3e-65:337:95//Hs.75798:H29106

R-PLACE1004979//EST//1.2e-96:475:96//Hs.120158:AA708789  
 R-PLACE1004982//ESTs//1.0e-98:471:98//Hs.106496:AI291776  
 R-PLACE1004985//ESTs//2.1e-88:456:93//Hs.135050:AI420335  
 R-PLACE1005026  
 R-PLACE1005027//ESTs, Weakly similar to N-methyl-D-aspartate receptor glutamate-binding chain [R.norvegicus] //0.72:145:66//Hs.11215:N56719  
 R-PLACE1005046//Homo sapiens mRNA for KIAA0575 protein, complete cds//5.3e-66:297:88//Hs.153468:AB011147  
 R-PLACE1005052//ESTs, Weakly similar to weak similarity to rat cytosolic acyl coenzyme A thioester hydrolase [C.elegans] //1.2e-106:543:95//Hs.18625:AI074605  
 R-PLACE1005066//ESTs//3.9e-92:459:96//Hs.62684:AA806103  
 R-PLACE1005077//Human triadin mRNA, complete cds//1.8e-05:121:69//Hs.68731:U18985  
 R-PLACE1005085//Homo sapiens PYRIN (MEFV) mRNA, complete cds//6.6e-49:314:74//Hs.113283:AF018080  
 R-PLACE1005086//ESTs//1.2e-73:379:94//Hs.110128:AA584364  
 R-PLACE1005101//Homo sapiens (clone zap128) mRNA, 3' end of cds//8.0e-99:531:92//Hs.75437:L40401  
 R-PLACE1005102//ESTs//7.2e-68:493:84//Hs.10593:AI201336  
 R-PLACE1005108//Human DNA fragmentation factor-45 mRNA, complete cds//9.2e-40:232:82//Hs.155344:U91985  
 R-PLACE1005111//EST//8.1e-10:189:68//Hs.136356:AA493225  
 R-PLACE1005128//ESTs//1.4e-78:501:87//Hs.15093:AA203423  
 R-PLACE1005146//ESTs//4.8e-93:460:97//Hs.37896:AA777349  
 R-PLACE1005162//ESTs//7.5e-51:277:95//Hs.28838:AI089013  
 R-PLACE1005176//ESTs//5.4e-75:366:97//Hs.48119:AA454227  
 R-PLACE1005181//EST//0.012:172:66//Hs.147107:AI190589  
 R-PLACE1005187//ESTs//5.6e-72:363:95//Hs.16577:AI022830

R-PLACE1005206//ESTs//5.3e-48:203:88//Hs.31792:H45211  
 R-PLACE1005232//ESTs//5.1e-41:287:84//Hs.138552:R99532  
 R-PLACE1005243//ESTs//1.1e-48:348:83//Hs.113310:R16767  
 R-PLACE1005261//ESTs//0.19:175:62//Hs.124337:AA829524  
 R-PLACE1005266//ESTs//1.9e-22:388:66//Hs.124146:AA699633  
 R-PLACE1005277//ESTs//1.5e-29:314:72//Hs.163710:AA024516  
 R-PLACE1005287//ESTs//3.6e-95:456:98//Hs.49282:AA970322  
 R-PLACE1005305//ESTs//9.9e-71:428:88//Hs.144855:AI197937  
 R-PLACE1005308//ESTs//3.8e-32:173:96//Hs.58239:AA215797  
 R-PLACE1005313//ESTs//5.2e-74:409:93//Hs.33368:AA206614  
 R-PLACE1005327//Chromosome 1 specific transcript KIAA0491//1.7e-104:537:  
 94//Hs.136309:AB007960  
 R-PLACE1005331//ESTs//2.1e-91:487:93//Hs.9291:AI189343  
 R-PLACE1005335//ESTs, Weakly similar to F23B2.4 [C.elegans]//3.8e-90:442  
 :97//Hs.70202:AA732975  
 R-PLACE1005373//ESTs//8.0e-93:526:91//Hs.98541:N38901  
 R-PLACE1005374//Homo sapiens KIAA0395 mRNA, partial cds//3.3e-44:344:80/  
 /Hs.43681:AL022394  
 R-PLACE1005409//EST//0.43:174:59//Hs.162077:AA479978  
 R-PLACE1005453//EST//7.9e-57:330:90//Hs.162306:AA555304  
 R-PLACE1005467//ESTs//2.2e-42:294:84//Hs.142257:AA188423  
 R-PLACE1005471//Human Line-1 repeat mRNA with 2 open reading frames//2.3  
 e-88:561:86//Hs.23094:M19503  
 R-PLACE1005477//Human methionine aminopeptidase mRNA, complete cds//6.9e  
 -80:549:83//Hs.78935:U29607  
 R-PLACE1005480//EST//0.99:39:82//Hs.157275:AI364046  
 R-PLACE1005481//EST//1.5e-31:281:79//Hs.132635:AI032875  
 R-PLACE1005494//Homo sapiens mRNA for semaphorin E, complete cds//0.036:  
 319:59//Hs.62705:AB000220

R-PLACE1005502//Homo sapiens formin binding protein 21 mRNA, complete cds//5.4e-57:277:98//Hs.28307:AF071185

R-PLACE1005526//ESTs//2.5e-30:233:83//Hs.119304:AA443325

R-PLACE1005528//Homo sapiens mRNA for cartilage-associated protein (CASP) //8.9e-20:321:69//Hs.155481:AJ006470

R-PLACE1005530//ESTs//3.7e-81:438:92//Hs.103380:AI291325

R-PLACE1005550//ESTs, Highly similar to HYPOTHETICAL 40.2 KD PROTEIN K12H4.3 IN CHROMOSOME III [Caenorhabditis elegans] //5.2e-95:458:98//Hs.38114:N62927

R-PLACE1005554//ESTs//8.8e-36:267:86//Hs.98288:AA203555

R-PLACE1005557//ESTs, Highly similar to MITOCHONDRIAL 60S RIBOSOMAL PROTEIN L2 PRECURSOR [Saccharomyces cerevisiae] //2.2e-64:345:94//Hs.7736:W81261

R-PLACE1005574//ESTs//2.3e-27:231:83//Hs.117771:R99835

R-PLACE1005584//ESTs//1.6e-36:188:98//Hs.152050:AA724612

R-PLACE1005595//ESTs//1.6e-91:453:96//Hs.85079:AI276023

R-PLACE1005603//ESTs//8.2e-99:533:93//Hs.96357:AI026927

R-PLACE1005611//ESTs//5.2e-28:183:89//Hs.24941:AA261857

R-PLACE1005623//ESTs//1.4e-102:505:96//Hs.58382:AA808964

R-PLACE1005630

R-PLACE1005639//ESTs//1.4e-51:256:98//Hs.1975:W72452

R-PLACE1005646//Homo sapiens RNA helicase-related protein mRNA, complete cds//1.0e-111:585:93//Hs.8765:AF083255

R-PLACE1005656//ESTs//2.7e-88:469:92//Hs.164054:AA528169

R-PLACE1005666//Homo sapiens X-ray repair cross-complementing protein 2 (XRCC2) mRNA, complete cds//3.3e-24:401:66//Hs.129727:AF035587

R-PLACE1005698//ESTs//0.00013:82:79//Hs.116331:AA629355

R-PLACE1005727//EST//0.15:206:63//Hs.105002:AA449332

R-PLACE1005730//EST//0.0014:129:70//Hs.127931:AA969259

R-PLACE1005739//ESTs, Moderately similar to unknown intracellular protein [M.musculus] //1.3e-42:236:94//Hs.23889:AI341137

R-PLACE1005755//ESTs//2.8e-32:308:80//Hs.159821:AA524070

R-PLACE1005763//Human mRNA for KIAA0118 gene, partial cds//3.3e-47:268:87//Hs.154326:D42087

R-PLACE1005799//ESTs, Highly similar to HYPOTHETICAL 68.7 KD PROTEIN ZK757.1 IN CHROMOSOME III [Caenorhabditis elegans] //7.7e-15:88:98//Hs.109857:AA088385

R-PLACE1005802//ESTs//2.8e-19:208:76//Hs.9271:W30941

R-PLACE1005803//ESTs//2.6e-75:417:92//Hs.71414:AA131327

R-PLACE1005804//EST//6.5e-20:182:70//Hs.149844:AI287693

R-PLACE1005828//ESTs//3.0e-15:194:77//Hs.106236:N50058

R-PLACE1005834//Retinoblastoma 1 (including osteosarcoma)//0.040:435:58//Hs.75770:L41870

R-PLACE1005845//EST//5.0e-61:294:99//Hs.133202:AI050965

R-PLACE1005850//ESTs//3.4e-82:425:96//Hs.7966:AI203471

R-PLACE1005851//ESTs//2.9e-21:165:84//Hs.23607:N98305

R-PLACE1005876//ESTs//0.48:296:57//Hs.39140:AI041842

R-PLACE1005884//ESTs//0.0027:177:66//Hs.150295:AA570558

R-PLACE1005898//ESTs//1.7e-98:467:98//Hs.159475:AI339981

R-PLACE1005921//ESTs//5.8e-96:480:95//Hs.30822:AA885501

R-PLACE1005923//ESTs//1.8e-66:333:96//Hs.150890:AI341793

R-PLACE1005925//Human Line-1 repeat mRNA with 2 open reading frames//2.8e-27:382:70//Hs.23094:M19503

R-PLACE1005932//ESTs, Moderately similar to MNK1 [H.sapiens] //1.1e-70:377:93//Hs.5662:AA868361

R-PLACE1005934//ESTs//1.0e-42:251:91//Hs.25092:AA922142

R-PLACE1005936//ESTs//1.2e-88:461:94//Hs.94125:N62913

R-PLACE1005951//ESTs//1.4e-83:533:86//Hs.21148:AI183729

R-PLACE1005953

R-PLACE1005955//ESTs, Highly similar to HYPOTHETICAL 54.2 KD PROTEIN IN CDC12-ORC6 INTERGENIC REGION [*Saccharomyces cerevisiae*]//2.2e-83:494:88//Hs.108117:AI097079

R-PLACE1005966//ESTs//1.1e-95:465:97//Hs.98510:AI016239

R-PLACE1005968//EST//0.26:103:66//Hs.161300:AI420897

R-PLACE1005990

R-PLACE1006002//Human mRNA for KIAA0355 gene, complete cds//2.0e-45:481:74//Hs.153014:AB002353

R-PLACE1006003//ESTs, Highly similar to HYPOTHETICAL 30.3 KD PROTEIN IN APE1/LAP4-CWP1 INTERGENIC REGION [*Saccharomyces cerevisiae*]//3.1e-112:593:93//Hs.111449:AI192946

R-PLACE1006011//ESTs, Moderately similar to NAD(+) ADP-RIBOSYLTRANSFERASE [D.melanogaster]//5.7e-100:596:88//Hs.24284:AA595596

R-PLACE1006017//ESTs//4.2e-18:296:68//Hs.133350:AI056276

R-PLACE1006037//ESTs, Weakly similar to T23D8.3 [*C.elegans*]//4.1e-102:491:98//Hs.61164:AI096332

R-PLACE1006040//ESTs//1.2e-92:443:98//Hs.111680:N93765

R-PLACE1006076//ESTs, Moderately similar to !!!! ALU SUBFAMILY SC WARNING ENTRY !!!! [*H.sapiens*]//2.0e-26:213:77//Hs.139007:H74314

R-PLACE1006119//ESTs//0.14:257:61//Hs.113149:AA908904

R-PLACE1006129//ESTs//3.8e-54:285:97//Hs.18827:W68002

R-PLACE1006139//ESTs, Highly similar to HYPOTHETICAL 52.9 KD PROTEIN IN SAP155-YMR31 INTERGENIC REGION [*Saccharomyces cerevisiae*]//2.6e-99:560:91//Hs.5249:U55977

R-PLACE1006143//Amylo-1,6-glucosidase, 4-alpha-glucanotransferase (glycogen debranching enzyme, glycogen storage disease type III)//0.038:463:59//Hs.904:U84010

R-PLACE1006157//ESTs//0.014:341:58//Hs.121773:AI357886

R-PLACE1006159//EST//0.00036:247:61//Hs.140054:AA668925  
R-PLACE1006164//ESTs//2.6e-31:362:73//Hs.141024:H07128  
R-PLACE1006167//Homo sapiens chromosome 19, cosmid F23149//5.8e-54:286:94//Hs.152894:AC005239  
R-PLACE1006170//ESTs, Highly similar to ALPHA-ADAPTIN [Rattus norvegicus]//2.7e-79:393:96//Hs.19121:AI125280  
R-PLACE1006187//Homo sapiens cyclin E2 mRNA, complete cds//5.1e-118:597:95//Hs.30464:AF091433  
R-PLACE1006195//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENTRY !!!! [H.sapiens]//6.8e-94:532:91//Hs.105216:AI361807  
R-PLACE1006196//ESTs//3.2e-66:382:90//Hs.18665:T99507  
R-PLACE1006205//EST//1.7e-89:448:96//Hs.116665:AA669114  
R-PLACE1006223//Human RNaseP protein p38 (RPP38) mRNA, complete cds//0.90:304:58//Hs.94986:U77664  
R-PLACE1006225//ESTs//7.2e-96:474:97//Hs.91165:AI079555  
R-PLACE1006236//ESTs//8.8e-105:535:95//Hs.7919:AI341472  
R-PLACE1006239//Homo sapiens BAC clone RG118D07 from 7q31//3.2e-99:497:95//Hs.3781:AC004142  
R-PLACE1006246//ESTs, Weakly similar to CMP-sialic acid transporter [Mus musculus]//1.3e-104:532:95//Hs.41151:AI301961  
R-PLACE1006248//Homo sapiens mRNA for KIAA0648 protein, partial cds//3.0e-97:499:95//Hs.31921:AB014548  
R-PLACE1006262//ESTs, Moderately similar to !!!! ALU SUBFAMILY SC WARNING ENTRY !!!! [H.sapiens]//1.6e-07:321:62//Hs.53057:W67839  
R-PLACE1006288//Voltage-dependent anion channel 1//3.8e-100:605:88//Hs.2060:L06132  
R-PLACE1006318//ESTs//2.4e-102:536:94//Hs.8109:AA005265  
R-PLACE1006325//ESTs//5.2e-105:518:96//Hs.102319:AI246503  
R-PLACE1006335//ESTs//5.1e-45:254:93//Hs.153585:R70900



R-PLACE1006357//EST//6.5e-09:309:62//Hs.132493:AA923168  
 R-PLACE1006360//Human mRNA for KIAA0090 gene, partial cds//0.0097:381:58  
 //Hs.154797:D42044  
 R-PLACE1006368//ESTs//7.9e-85:412:97//Hs.150587:AI079284  
 R-PLACE1006371//ESTs//7.7e-74:442:88//Hs.143671:W61053  
 R-PLACE1006382  
 R-PLACE1006385//ESTs//5.3e-06:346:61//Hs.163706:AA515748  
 R-PLACE1006412//EST//7.7e-46:306:86//Hs.149580:AI281881  
 R-PLACE1006414//Homo sapiens LIM protein mRNA, complete cds//4.1e-43:551  
 :69//Hs.154103:AF061258  
 R-PLACE1006438//ESTs//1.1e-77:284:86//Hs.24545:AI278629  
 R-PLACE1006445//ESTs//4.4e-53:259:99//Hs.24481:AA573139  
 R-PLACE1006469//ESTs//9.4e-102:482:98//Hs.7218:AA936961  
 R-PLACE1006470//ESTs//1.0:271:57//Hs.144517:AA938297  
 R-PLACE1006482//ESTs//4.0e-61:354:92//Hs.51305:T47418  
 R-PLACE1006492//EST//1.8e-09:48:91//Hs.144451:AA827722  
 R-PLACE1006506//ESTs//0.012:161:61//Hs.145333:AI251374  
 R-PLACE1006521//Human mRNA for KIAA0013 gene, complete cds//2.1e-15:415:  
 63//Hs.48824:D87717  
 R-PLACE1006531//ESTs//5.6e-31:213:87//Hs.125153:AA453723  
 R-PLACE1006534//ESTs//6.5e-101:512:95//Hs.27763:W46368  
 R-PLACE1006540//ESTs//7.3e-40:320:79//Hs.121659:H02532  
 R-PLACE1006552//EST//0.38:418:56//Hs.140470:AA765214  
 R-PLACE1006598//ESTs//4.0e-80:409:95//Hs.142868:AI128443  
 R-PLACE1006615//Homo sapiens eukaryotic translation initiation factor eI  
 F3, p35 subunit mRNA, complete cds//9.3e-118:590:95//Hs.155377:U97670  
 R-PLACE1006617//ESTs//8.1e-31:246:83//Hs.139128:AA205322  
 R-PLACE1006626//ESTs//0.90:98:68//Hs.96322:AA541615  
 R-PLACE1006629//Human mRNA for KIAA0386 gene, complete cds//5.3e-33:315:

78//Hs.101359:AB002384  
R-PLACE1006640//ESTs//3.7e-26:137:100//Hs.32672:W16522  
R-PLACE1006673//Interleukin 10//8.4e-47:330:83//Hs.2180:M57627  
R-PLACE1006678//ESTs//1.1e-13:87:98//Hs.34035:D87736  
R-PLACE1006704//ESTs//2.6e-65:394:89//Hs.30582:D12214  
R-PLACE1006731//Homo sapiens clone 23923 mRNA sequence//1.9e-102:486:98/  
/Hs.12472:AF038172  
R-PLACE1006754//EST//1.0e-61:381:89//Hs.14727:T83861  
R-PLACE1006760//Homo sapiens clone 24800 mRNA sequence//3.8e-73:394:93//  
Hs.7252:AF070622  
R-PLACE1006779//ESTs//1.4e-69:405:90//Hs.136235:AA262658  
R-PLACE1006782//EST//1.8e-25:197:86//Hs.137257:N33234  
R-PLACE1006792//ESTs//1.8e-43:317:84//Hs.139190:N55515  
R-PLACE1006795//ESTs//6.4e-68:350:95//Hs.11092:AA916335  
R-PLACE1006800//ESTs//1.9e-55:268:100//Hs.126695:AA917989  
R-PLACE1006805//ESTs//6.6e-91:484:93//Hs.94262:AA768847  
R-PLACE1006815//ESTs//2.1e-49:364:83//Hs.142031:AA809159  
R-PLACE1006819//ESTs, Highly similar to LINE-1 REVERSE TRANSCRIPTASE HO  
MOLOG [Homo sapiens]//1.0e-87:481:92//Hs.141263:H64113  
R-PLACE1006829//ESTs//5.7e-43:332:83//Hs.19906:AA456933  
R-PLACE1006860//ESTs//0.96:138:63//Hs.136649:AA828359  
R-PLACE1006867//ESTs//1.4e-98:478:97//Hs.10299:N35008  
R-PLACE1006878//EST//8.4e-48:243:97//Hs.54970:N93536  
R-PLACE1006883//EST//3.1e-46:300:88//Hs.162404:AA573131  
R-PLACE1006901//ESTs//3.0e-95:496:94//Hs.47546:AA181348  
R-PLACE1006904//ESTs//5.8e-18:304:68//Hs.125816:AA806089  
R-PLACE1006917//Endothelin receptor type B//0.00012:451:60//Hs.82002:D13  
168  
R-PLACE1006932//ESTs//4.6e-56:285:96//Hs.114727:AI379514

R-PLACE1006935//ESTs//3.6e-12:157:73//Hs.161714:AA229078  
R-PLACE1006958//Human mRNA for KIAA0201 gene, complete cds//3.2e-25:494:  
63//Hs.36927:D86956  
R-PLACE1006961//Tyrosine aminotransferase//2.5e-46:471:74//Hs.2999:X5252  
0  
R-PLACE1006962//ESTs, Moderately similar to plakophilin 2b [H.sapiens]//  
9.0e-29:324:68//Hs.154257:AI275982  
R-PLACE1006966//ESTs//4.5e-99:470:99//Hs.46913:AI017636  
R-PLACE1006989//ESTs//2.2e-68:353:97//Hs.14394:R61257  
R-PLACE1007014//ESTs//3.4e-86:457:94//Hs.129819:AA838366  
R-PLACE1007021//ESTs//1.6e-93:539:90//Hs.7111:U55971  
R-PLACE1007045//Human Line-1 repeat mRNA with 2 open reading frames//6.6  
e-83:584:82//Hs.23094:M19503  
R-PLACE1007053//ESTs//4.2e-85:550:88//Hs.7984:AI202575  
R-PLACE1007097//ESTs//6.4e-78:493:86//Hs.56406:N91027  
R-PLACE1007105//ESTs//5.3e-70:381:91//Hs.22605:N74202  
R-PLACE1007111//ESTs//8.6e-75:358:99//Hs.145629:AA398646  
R-PLACE1007112//ESTs//6.9e-69:371:94//Hs.71922:AA148417  
R-PLACE1007132//ESTs//1.2e-36:373:69//Hs.10762:W28948  
R-PLACE1007140//ESTs//1.7e-70:360:96//Hs.56179:W56794  
R-PLACE1007178//EST//0.68:85:65//Hs.147010:AI184765  
R-PLACE1007226//ESTs//3.1e-78:452:90//Hs.8033:N94998  
R-PLACE1007238//ESTs//5.2e-70:362:95//Hs.85636:AA740619  
R-PLACE1007239//Human mRNA for transcription elongation factor S-II, hS-  
II-T1, complete cds//6.3e-93:534:89//Hs.80598:D50495  
R-PLACE1007242//ESTs//1.2e-80:390:98//Hs.117325:AA699450  
R-PLACE1007243//ESTs, Weakly similar to transporter protein [H.sapiens]//  
/3.7e-73:357:98//Hs.18272:N78499  
R-PLACE1007257//Homo sapiens mRNA for dia-156 protein//4.3e-85:487:91//H

s.121556:Y15909  
R-PLACE1007274//ESTs//4.3e-79:430:93//Hs.146023:AI275071  
R-PLACE1007276//ESTs//1.5e-33:338:74//Hs.142850:R38419  
R-PLACE1007282//ESTs//4.8e-98:532:93//Hs.10071:AA100812  
R-PLACE1007286//Human mRNA for KIAA0118 gene, partial cds//2.9e-50:518:74//Hs.154326:D42087  
R-PLACE1007301  
R-PLACE1007317  
R-PLACE1007342  
R-PLACE1007346//Homo sapiens estrogen-responsive B box protein (EBBP) mRNA, complete cds//1.2e-66:367:91//Hs.76596:AF096870  
R-PLACE1007367//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENTRY !!!! [H.sapiens]//2.2e-98:488:96//Hs.24359:AA699594  
R-PLACE1007375//ESTs//2.3e-67:375:92//Hs.33368:AA206614  
R-PLACE1007386//ESTs//0.020:242:62//Hs.42768:AI129945  
R-PLACE1007402//ESTs//1.6e-91:441:97//Hs.26243:AA455877  
R-PLACE1007409//Homo sapiens mitoxantrone resistance protein 1 mRNA, partial sequence//2.4e-113:590:94//Hs.14387:AF093771  
R-PLACE1007416//ESTs, Weakly similar to DIPEPTIDYL PEPTIDASE IV [H.sapiens]//3.8e-115:579:95//Hs.72165:AI243857  
R-PLACE1007450//Human macrophage-derived chemokine precursor (MDC) mRNA, complete cds//2.7e-38:311:80//Hs.97203:U83171  
R-PLACE1007452//EST//2.5e-42:386:77//Hs.140562:AA826514  
R-PLACE1007460//ESTs//4.9e-87:434:95//Hs.28472:AI028230  
R-PLACE1007478  
R-PLACE1007484//ESTs//6.8e-08:64:92//Hs.100251:AA535975  
R-PLACE1007488//Dystrophin (muscular dystrophy, Duchenne and Becker type s), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272//0.26:411:60//Hs.79012:M18533

R-PLACE1007507//ESTs//2.2e-11:136:76//Hs.128815:AA678072

R-PLACE1007511//ESTs, Highly similar to KERATIN, TYPE I CYTOSKELETAL 14  
[Homo sapiens]//1.5e-41:261:89//Hs.9029:W57657

R-PLACE1007524//ESTs//5.8e-45:297:87//Hs.154923:AA491377

R-PLACE1007525//Human mRNA for KIAA0118 gene, partial cds//1.9e-44:422:7  
5//Hs.154326:D42087

R-PLACE1007544//ESTs//8.4e-59:327:93//Hs.27410:N25612

R-PLACE1007547//EST//0.00010:107:71//Hs.146867:AI161404

R-PLACE1007557//ESTs//1.6e-43:356:79//Hs.44702:AI148840

R-PLACE1007583//ESTs//1.7e-41:214:97//Hs.155071:AA584257

R-PLACE1007598//Homo sapiens clone 23939 mRNA sequence//4.8e-104:554:93/  
/Hs.21838:AF038179

R-PLACE1007618//Lymphocyte cytosolic protein 1 (L-plastin)//0.54:161:65/  
/Hs.76506:J02923

R-PLACE1007621//Homo sapiens clone 23859 mRNA sequence//4.8e-105:537:94/  
/Hs.151046:AF038176

R-PLACE1007632

R-PLACE1007645//ESTs//0.99:187:62//Hs.163453:AI344106

R-PLACE1007649//ESTs//2.2e-108:561:94//Hs.24398:AI262946

R-PLACE1007677//ESTs, Moderately similar to !!!! ALU SUBFAMILY SB2 WARNI  
NG ENTRY !!!! [H.sapiens]//9.0e-37:190:97//Hs.23437:AA707331

R-PLACE1007688//ESTs//7.5e-79:409:95//Hs.6166:AI376944

R-PLACE1007690//ESTs, Weakly similar to NADH-UBIQUINONE OXIDOREDUCTASE C  
HAIN 5 [Ascaris suum]//3.4e-61:384:89//Hs.92918:AA133274

R-PLACE1007697//ESTs, Highly similar to GCN20 PROTEIN [Saccharomyces ce  
revisiae]//1.8e-84:501:88//Hs.91251:U66685

R-PLACE1007705//Human mRNA for apolipoprotein E receptor 2, complete cds  
//0.43:307:59//Hs.54481:D86407

R-PLACE1007706//Homo sapiens metalloprotease 1 (MP1) mRNA, complete cds/

/5.7e-75:374:96//Hs.4812:AF061243  
R-PLACE1007725//ESTs, Weakly similar to No definition line found [C.elegans] //3.1e-39:253:88//Hs.108797:AA476815  
R-PLACE1007729//ESTs//2.7e-44:392:79//Hs.142375:AA398619  
R-PLACE1007730//Homo sapiens mRNA for KIAA0685 protein, complete cds//6.7e-94:556:89//Hs.153121:AB014585  
R-PLACE1007737//ESTs//1.1e-41:345:80//Hs.114671:N39322  
R-PLACE1007743//ESTs//2.8e-17:98:100//Hs.124258:AA976778  
R-PLACE1007746//ESTs//5.3e-69:413:90//Hs.5297:AA156903  
R-PLACE1007791//ESTs, Weakly similar to TEICHOIC ACID BIOSYNTHESIS PROTEIN A [Bacillus subtilis] //8.6e-27:143:98//Hs.144194:AA706337  
R-PLACE1007807//Human Line-1 repeat mRNA with 2 open reading frames//9.9e-45:428:76//Hs.23094:M19503  
R-PLACE1007810//ESTs//5.9e-15:143:82//Hs.126257:AI279044  
R-PLACE1007829//ESTs//2.2e-22:190:84//Hs.142707:W24050  
R-PLACE1007843//ESTs//5.3e-110:556:95//Hs.107287:AI308839  
R-PLACE1007846//Human Line-1 repeat mRNA with 2 open reading frames//1.7e-95:525:91//Hs.23094:M19503  
R-PLACE1007852//ESTs//4.5e-14:174:75//Hs.153419:N52017  
R-PLACE1007858//Homo sapiens mRNA for KIAA0766 protein, complete cds//2.1e-111:574:94//Hs.28020:AB018309  
R-PLACE1007866//EST//1.8e-48:262:96//Hs.141009:H01178  
R-PLACE1007877//ESTs//1.2e-94:478:96//Hs.5999:AI207832  
R-PLACE1007897//ESTs//2.3e-92:437:99//Hs.122843:AI189060  
R-PLACE1007908//Homo sapiens mRNA, chromosome 1 specific transcript KIAA0487//2.8e-89:460:95//Hs.92381:AB007956  
R-PLACE1007946//ESTs//2.8e-28:172:78//Hs.126784:AA521510  
R-PLACE1007954//ESTs//6.1e-72:366:95//Hs.27842:AI217966  
R-PLACE1007955//Homo sapiens cyclin-D binding Myb-like protein mRNA, com

plete cds//3.9e-103:509:96//Hs.5671:AF084530  
R-PLACE1007958//Homo sapiens cAMP-specific phosphodiesterase 8B (PDE8B)  
mRNA, partial cds//7.2e-89:465:93//Hs.78106:AF079529  
R-PLACE1007969//ESTs, Weakly similar to F35C12.2 [C.elegans]//1.4e-113:5  
34:99//Hs.44268:AA455900  
R-PLACE1007990//ESTs, Highly similar to DOSAGE COMPENSATION REGULATOR [  
Drosophila melanogaster]//3.8e-97:493:95//Hs.6141:U69564.  
R-PLACE1008000//ESTs//0.00013:241:65//Hs.44369:AI206835  
R-PLACE1008002//ESTs//2.2e-83:397:98//Hs.28780:AI263612  
R-PLACE1008044//ESTs, Moderately similar to NUCLEAR PORE COMPLEX PROTEIN  
NUP107 [R.norvegicus]//2.0e-115:575:95//Hs.92395:AA779854  
R-PLACE1008045//EST//2.6e-89:465:94//Hs.47374:N51935  
R-PLACE1008080//EST//0.27:118:65//Hs.144110:AI054269  
R-PLACE1008095//ESTs//5.5e-23:268:73//Hs.152525:AA516469  
R-PLACE1008111//ESTs, Weakly similar to oxidoreductase [H.sapiens]//4.4e  
-108:537:96//Hs.28877:AI309334  
R-PLACE1008122//ESTs//6.5e-103:531:94//Hs.34737:AI028617  
R-PLACE1008129//ESTs//0.76:96:66//Hs.65373:AA883511  
R-PLACE1008132//ESTs//5.9e-05:113:72//Hs.13014:W26381  
R-PLACE1008177//ESTs//7.2e-107:557:93//Hs.132851:AI028266  
R-PLACE1008181//ESTs//5.3e-97:473:97//Hs.57483:AA776267  
R-PLACE1008198//ESTs//3.9e-16:120:85//Hs.9142:AA662107  
R-PLACE1008201//Homo sapiens mRNA for KIAA0530 protein, partial cds//1.6  
e-104:551:93//Hs.10801:AB011102  
R-PLACE1008209//ESTs//1.2e-72:366:96//Hs.92308:AI052701  
R-PLACE1008231//ESTs//1.2e-70:363:94//Hs.25094:R80871  
R-PLACE1008244//ESTs//1.3e-98:543:92//Hs.25130:AA218990  
R-PLACE1008273//ESTs//6.1e-16:153:79//Hs.115987:AA483808  
R-PLACE1008275

R-PLACE1008280//ESTs//1.3e-66:353:94//Hs.156376:AI338705  
R-PLACE1008309//ESTs//2.8e-100:511:95//Hs.45080:N49852  
R-PLACE1008329//V-myc avian myelocytomatosis viral oncogene homolog//0.5  
3:206:62//Hs.79070:K02276  
R-PLACE1008330//ESTs, Weakly similar to EOSINOPHIL LYSOPHOSPHOLIPASE [H.  
sapiens] //8.6e-79:297:91//Hs.146477:AI128445  
R-PLACE1008331//ESTs//0.98:156:62//Hs.108548:AA081656  
R-PLACE1008356//Homo sapiens mRNA for KIAA0679 protein, partial cds//2.1  
e-99:556:90//Hs.5734:AB014579  
R-PLACE1008368//EST//0.0027:198:63//Hs.160868:AI359052  
R-PLACE1008369//ESTs//5.4e-28:167:92//Hs.19530:AA480009  
R-PLACE1008392//ESTs, Moderately similar to !!!! ALU SUBFAMILY SC WARNIN  
G ENTRY !!!! [H.sapiens] //2.0e-41:448:72//Hs.139007:H74314  
R-PLACE1008398//ESTs, Highly similar to Mig-6//1.4e-103:529:94//Hs.11169  
:AA156242  
R-PLACE1008401//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT  
RY !!!! [H.sapiens] //1.2e-81:536:87//Hs.7570:W31010  
R-PLACE1008402//Homo sapiens mRNA for p115, complete cds//5.1e-103:521:9  
5//Hs.7763:D86326  
R-PLACE1008405//ESTs//1.2e-89:485:92//Hs.138241:AA767440  
R-PLACE1008424//ESTs//6.7e-97:508:93//Hs.6709:AI379778  
R-PLACE1008426//ESTs//5.5e-30:174:92//Hs.7946:AA651757  
R-PLACE1008429//ESTs//2.1e-12:188:71//Hs.140769:AA931562  
R-PLACE1008437//ESTs//7.1e-54:266:98//Hs.13068:AA001928  
R-PLACE1008455//ESTs//4.7e-69:471:85//Hs.28337:AA210761  
R-PLACE1008457//EST//8.6e-14:202:71//Hs.149887:AI289387  
R-PLACE1008465//ESTs//3.8e-80:426:93//Hs.153146:AI299636  
R-PLACE1008488//ESTs//7.9e-73:388:94//Hs.97268:AA292180  
R-PLACE1008524//ESTs//7.4e-107:545:95//Hs.10441:N62816



R-PLACE1008531//ESTs//3.8e-68:427:87//Hs.56607:H23560  
R-PLACE1008532  
R-PLACE1008533//ESTs//2.5e-52:318:88//Hs.7274:AA476850  
R-PLACE1008568//ESTs//3.2e-99:486:97//Hs.84414:AI423223  
R-PLACE1008584//EST//2.2e-18:154:68//Hs.141498:N50064  
R-PLACE1008621//ESTs, Weakly similar to line-1 protein ORF1 [H.sapiens] /  
/8.6e-67:483:82//Hs.140416:AA778649  
R-PLACE1008625  
R-PLACE1008626//ESTs//4.7e-73:372:95//Hs.23491:AA642454  
R-PLACE1008627//ESTs//1.6e-90:475:93//Hs.102401:AI004972  
R-PLACE1008629//ESTs//8.0e-93:492:93//Hs.20843:AA699512  
R-PLACE1008630//ESTs//1.0e-94:453:98//Hs.34840:AI279612  
R-PLACE1008643//Human mRNA for KIAA0355 gene, complete cds//2.8e-49:422:  
79//Hs.153014:AB002353  
R-PLACE1008650//Homo sapiens pleiotropic regulator 1 (PLRG1) mRNA, compl  
ete cds//7.9e-90:434:97//Hs.147967:AF044333  
R-PLACE1008693//ISLET AMYLOID POLYPEPTIDE PRECURSOR//1.8e-41:505:71//Hs.  
51048:X68830  
R-PLACE1008696//Cytochrome P450, subfamily I (aromatic compound-inducibl  
e), polypeptide 2//1.7e-51:316:76//Hs.1361:M55053  
R-PLACE1008715//EST//0.63:114:64//Hs.121353:AA758600  
R-PLACE1008748//ESTs, Weakly similar to !!!! ALU CLASS B WARNING ENTRY !  
!!! [H.sapiens]//2.3e-40:281:83//Hs.142209:AA873303  
R-PLACE1008757//ESTs//1.4e-45:226:99//Hs.22822:H06408  
R-PLACE1008790//ESTs//0.035:67:76//Hs.153554:AI286313  
R-PLACE1008798//ESTs//4.9e-59:285:99//Hs.49018:N79930  
R-PLACE1008807//ESTs//1.7e-82:413:96//Hs.130745:AA573217  
R-PLACE1008808//Homo sapiens putative checkpoint control protein HRAD1 m  
RNA, complete cds//1.1e-98:499:95//Hs.7179:AF011905

R-PLACE1008813//ESTs, Weakly similar to coded for by C. elegans cDNA cm1  
0e3 [C.elegans] //4.2e-92:490:93//Hs.110454:H11810

R-PLACE1008851//ESTs//2.4e-84:421:95//Hs.158893:AI378428

R-PLACE1008854

R-PLACE1008867//ESTs//1.1e-77:400:95//Hs.44198:AI093502

R-PLACE1008887//Oxytocin receptor//1.1e-43:601:67//Hs.2820:X64878

R-PLACE1008902//ESTs//0.023:208:61//Hs.154164:AI246893

R-PLACE1008920//Homo sapiens mRNA for KIAA0765 protein, partial cds//2.6  
e-56:344:89//Hs.62318:AB018308

R-PLACE1008925//ESTs//0.17:294:57//Hs.105113:AA457018

R-PLACE1008934//ESTs//2.0e-61:339:92//Hs.100448:AA622653

R-PLACE1008941//ESTs, Moderately similar to ATP-BINDING CASSETTE TRANSP  
ORTER 2 [Mus musculus] //1.3e-19:488:63//Hs.15780:U66680

R-PLACE1008947//ESTs//1.3e-81:385:99//Hs.71574:AI376573

R-PLACE1009020//ESTs//2.9e-79:419:94//Hs.121816:AA775419

R-PLACE1009027//Homo sapiens mRNA for doublecortin//3.1e-82:434:94//Hs.3  
4780:AJ003112

R-PLACE1009039//ESTs//2.8e-83:448:92//Hs.129179:AA988520

R-PLACE1009045//ESTs//1.6e-64:318:97//Hs.103423:AA814195

R-PLACE1009048//ESTs//2.7e-17:403:63//Hs.149343:AI249139

R-PLACE1009050//ESTs//2.0e-88:475:92//Hs.122925:AA909008

R-PLACE1009060//ESTs, Highly similar to HYPOTHETICAL 98.3 KD PROTEIN R1  
OE12.1 IN CHROMOSOME III [Caenorhabditis elegans] //1.2e-112:555:96//Hs.9  
663:AA527142

R-PLACE1009090//ESTs//5.0e-13:175:75//Hs.140608:N53448

R-PLACE1009094//Human splicing factor SRp30c mRNA, complete cds//0.98:16  
1:63//Hs.77608:AL021546

R-PLACE1009099//ESTs, Highly similar to MKR2 PROTEIN [Mus musculus] //0.  
037:63:84//Hs.39943:AA203136

R-PLACE1009110//EST//5.8e-17:307:65//Hs.117264:AA682549  
 R-PLACE1009111//ESTs//1.9e-57:349:90//Hs.11260:N98983  
 R-PLACE1009130//ESTs, Weakly similar to hypothetical protein 2 [H.sapien  
 s] //6.5e-97:501:94//Hs.11123:AA703945  
 R-PLACE1009150//LAMIN B1//0.064:393:60//Hs.89497:L37747  
 R-PLACE1009155//ESTs, Moderately similar to ovarian-specific protein [R.  
 norvegicus] //2.5e-36:163:82//Hs.93332:AA811920  
 R-PLACE1009158//ESTs//0.30:149:65//Hs.155796:R80005  
 R-PLACE1009166//ESTs//3.3e-34:292:77//Hs.140255:AA708322  
 R-PLACE1009172//EST//8.9e-21:364:67//Hs.142557:AA464948  
 R-PLACE1009174//ESTs//2.9e-18:274:70//Hs.139241:AA283707  
 R-PLACE1009183//ESTs//2.3e-44:297:87//Hs.136839:H93717  
 R-PLACE1009186//ESTs, Weakly similar to No definition line found [C.eleg  
 ans] //1.5e-109:572:94//Hs.54943:Z78396  
 R-PLACE1009190//ESTs//2.6e-53:318:90//Hs.25245:AA176701  
 R-PLACE1009200//H.sapiens mRNA for sortilin//3.2e-33:195:92//Hs.104247:X  
 98248  
 R-PLACE1009230//ESTs//3.0e-31:153:92//Hs.124116:AA772680  
 R-PLACE1009246//ESTs//2.7e-90:488:92//Hs.10706:AA909018  
 R-PLACE1009308//ESTs//0.022:46:97//Hs.36545:AA075423  
 R-PLACE1009319//ESTs//7.7e-99:533:92//Hs.109654:N91279  
 R-PLACE1009328//Human Line-1 repeat mRNA with 2 open reading frames//7.3  
 e-82:578:82//Hs.23094:M19503  
 R-PLACE1009335//EST//1.3e-64:311:99//Hs.130558:AI004397  
 R-PLACE1009338//ESTs//6.0e-70:386:93//Hs.3542:AI015782  
 R-PLACE1009368//ESTs//1.4e-18:107:98//Hs.133303:W04760  
 R-PLACE1009375//ESTs//8.9e-36:313:76//Hs.24608:AA161260  
 R-PLACE1009388//EST//4.4e-11:101:83//Hs.147074:AI188883  
 R-PLACE1009398//ESTs//5.7e-63:335:93//Hs.149003:AI243186

R-PLACE1009404//ESTs//3.6e-94:452:98//Hs.103177:W72798  
 R-PLACE1009410//ESTs//2.2e-112:553:96//Hs.61779:AA195255  
 R-PLACE1009434//EST//3.4e-15:109:74//Hs.103742:U48632  
 R-PLACE1009443//EST//7.5e-61:302:98//Hs.157787:AI361269  
 R-PLACE1009444//PHOSPHATIDYLINOSITOL 4-KINASE ALPHA//6.6e-85:479:90//Hs.  
 76987:AF012872  
 R-PLACE1009459//ESTs//9.3e-86:437:95//Hs.104871:AI161427  
 R-PLACE1009476//Homo sapiens Chromosome 16 BAC clone CIT987SK-A-67A1//1.  
 3e-42:266:89//Hs.155049:AC004531  
 R-PLACE1009477//ESTs//2.0e-50:367:82//Hs.152788:AA630925  
 R-PLACE1009493//ESTs//4.5e-14:150:78//Hs.143918:AA699596  
 R-PLACE1009524//ESTs//2.9e-97:454:99//Hs.7189:AA767698  
 R-PLACE1009539//ESTs//9.1e-94:454:97//Hs.154706:AI262131  
 R-PLACE1009542//Homo sapiens apoptotic protease activating factor 1 (Apa  
 f-1) mRNA, complete cds//1.4e-10:289:63//Hs.77579:AF013263  
 R-PLACE1009571//ESTs//2.1e-23:125:100//Hs.41767:AA732326  
 R-PLACE1009581//ESTs, Weakly similar to FIBRINOGEN ALPHA AND ALPHA-E CHA  
 IN PRECURSORS [H.sapiens]//0.0012:56:91//Hs.12151:AA001818  
 R-PLACE1009595//Homo sapiens mRNA for KIAA0635 protein, complete cds//6.  
 0e-42:547:70//Hs.69157:AB014535  
 R-PLACE1009596//ESTs//1.9e-102:588:90//Hs.142395:AI374735  
 R-PLACE1009607//ESTs//0.0093:107:70//Hs.70932:AA126482  
 R-PLACE1009613//ESTs//7.5e-101:488:97//Hs.5905:AA946680  
 R-PLACE1009621//EST//0.99:261:60//Hs.149030:AI243338  
 R-PLACE1009622//ESTs//8.0e-93:508:92//Hs.20967:AI422858  
 R-PLACE1009637//EST//8.7e-90:442:97//Hs.121372:AA758701  
 R-PLACE1009639//EST//8.5e-49:279:93//Hs.117447:R27213  
 R-PLACE1009659//Homo sapiens mRNA for KIAA0587 protein, complete cds//3.  
 3e-109:589:92//Hs.21862:AB011159

R-PLACE1009665//ESTs, Weakly similar to line-1 protein ORF1 [H.sapiens] /  
/9.9e-62:483:79//Hs.140416:AA778649

R-PLACE1009670//Homo sapiens genethonin 1 mRNA, complete cds//6.6e-63:31  
0:97//Hs.109590:AF062534

R-PLACE1009708//ESTs//3.0e-94:471:96//Hs.40091:N48582

R-PLACE1009721//ESTs, Weakly similar to MSF1 PROTEIN [S.cerevisiae]//4.2  
e-98:529:92//Hs.3945:AA004210

R-PLACE1009731//ESTs, Weakly similar to immune associated protein 38 [M.  
musculus]//6.8e-85:489:89//Hs.26194:AA033989

R-PLACE1009763//Homo sapiens UBA3 (UBA3) mRNA, complete cds//2.0e-117:59  
8:95//Hs.154320:AF046024

R-PLACE1009794//ESTs//7.9e-102:529:95//Hs.42927:N20989

R-PLACE1009798//Human DNA sequence from clone 1189B24 on chromosome Xq25  
-26.3. Contains NADH-Ubiquinone Oxidoreductase MLRQ subunit (EC 1.6.5.3,  
EC 1.6.99.3, CI-MLRQ), Tubulin Beta and Proto-oncogene Tyrosine-protein  
Kinase FER (EC 2.7.1.112, P94-FER, C-FER, TYK3) pseudogenes, and part o  
f a novel gene similar to hypothetical proteins S. pombe C22F3.14C and C  
. elegans C16A3.8. Contains ESTs and GSSs//1.1e-113:549:97//Hs.16411:AL0  
30996

R-PLACE1009845//ESTs//9.5e-106:560:93//Hs.117751:AI056868

R-PLACE1009879//ESTs//1.8e-61:399:86//Hs.141012:R68748

R-PLACE1009886//EST//0.54:153:64//Hs.144281:AA081328

R-PLACE1009888//ESTs//2.7e-105:520:97//Hs.108646:AA613031

R-PLACE1009908//ESTs, Weakly similar to similar to mouse MMR1 [C.elegans  
]//1.6e-114:594:94//Hs.67466:AI219740

R-PLACE1009921//ESTs//7.6e-05:291:60//Hs.124786:AA825563

R-PLACE1009924//EST//1.2e-42:216:98//Hs.31742:H20276

R-PLACE1009925//ESTs//5.4e-30:154:100//Hs.114605:AI304317

R-PLACE1009935//ESTs//1.4e-83:417:97//Hs.131755:AA496543

R-PLACE1009947//Keratin 9//1.0:273:61//Hs.2783:Z29074  
R-PLACE1009971//ESTs//1.5e-87:424:98//Hs.13781:AI160540  
R-PLACE1009992//ESTs//1.3e-87:531:87//Hs.55044:AA460698  
R-PLACE1009995//ESTs//1.3e-103:575:91//Hs.71218:C75347  
R-PLACE1009997//Small inducible cytokine A5 (RANTES)//1.1e-42:286:86//Hs  
.155464:AF088219  
R-PLACE1010023//ESTs, Weakly similar to C27F2.7 gene product [C.elegans]  
//1.7e-17:137:86//Hs.7049:AI141736  
R-PLACE1010031//ESTs//0.22:191:62//Hs.127787:AA832204  
R-PLACE1010053//ESTs, Moderately similar to spermatid perinuclear RNA-bi  
nding protein Spnr [M.musculus]//7.6e-104:546:94//Hs.8215:AA521150  
R-PLACE1010069//ESTs//0.99:173:59//Hs.21415:AI150905  
R-PLACE1010074//Homo sapiens sorting nexin 2 (SNX2) mRNA, complete cds//  
1.5e-88:543:88//Hs.11183:AF065482  
R-PLACE1010076//ESTs//3.4e-106:530:95//Hs.28005:AA604375  
R-PLACE1010083//ESTs//4.1e-65:395:88//Hs.6103:AA496424  
R-PLACE1010089//ESTs//1.6e-70:348:97//Hs.9011:AA418615  
R-PLACE1010096//ESTs, Highly similar to hypothetical protein, 100K [R.no  
rvegicus]//2.8e-104:565:92//Hs.11469:U69567  
R-PLACE1010102//ESTs//7.7e-50:311:89//Hs.5518:AI052015  
R-PLACE1010105//ESTs//6.0e-94:483:94//Hs.62684:AA806103  
R-PLACE1010106//ESTs, Weakly similar to putative p150 [H.sapiens]//1.6e-  
107:575:93//Hs.48301:AA122270  
R-PLACE1010134//EST//8.5e-59:314:94//Hs.135005:AI095130  
R-PLACE1010148//A-KINASE ANCHOR PROTEIN 79//0.52:351:56//Hs.48714:M90359  
R-PLACE1010152//ESTs//1.9e-40:240:90//Hs.17054:AI139897  
R-PLACE1010181//ESTs//3.6e-64:307:99//Hs.154163:AJ003313  
R-PLACE1010194//ESTs//2.7e-70:366:96//Hs.5301:T58466  
R-PLACE1010202//ESTs//0.57:120:67//Hs.58873:W95037

R-PLACE1010231  
R-PLACE1010261//EST//6.9e-50:251:98//Hs.148208:AA897478  
R-PLACE1010270//ESTs//1.9e-87:430:96//Hs.25252:AI079545  
R-PLACE1010274//ESTs//1.9e-57:439:81//Hs.30078:H04535  
R-PLACE1010293//ESTs//8.1e-41:310:81//Hs.146811:AA410788  
R-PLACE1010321//ESTs//5.7e-50:246:99//Hs.151445:AA351081  
R-PLACE1010324//ESTs//0.00025:377:60//Hs.97430:AA398568  
R-PLACE1010329//Small inducible cytokine A5 (RANTES)//2.4e-40:300:82//Hs  
.155464:AF088219  
R-PLACE1010341//EST, Moderately similar to !!!! ALU SUBFAMILY SQ WARNING  
ENTRY !!!! [H.sapiens]//9.9e-32:190:77//Hs.152369:AA504818  
R-PLACE1010362//ESTs//8.2e-86:404:99//Hs.25625:AA669327  
R-PLACE1010364//ESTs//1.5e-105:556:93//Hs.12229:AA149594  
R-PLACE1010383//Homo sapiens mRNA for putative lipoic acid synthetase, p  
artial//4.9e-35:166:86//Hs.53531:AJ224162  
R-PLACE1010401//ESTs//2.3e-85:450:93//Hs.23193:AA418152  
R-PLACE1010481//ESTs//0.012:280:59//Hs.5579:AI392816  
R-PLACE1010491//Homo sapiens Cre binding protein-like 2 mRNA, complete c  
ds//2.4e-89:438:96//Hs.13313:AF039081  
R-PLACE1010492  
R-PLACE1010522//EST//0.43:82:68//Hs.89303:AA284031  
R-PLACE1010547//ESTs//3.4e-36:228:89//Hs.128724:AA215455  
R-PLACE1010562//ESTs//4.8e-68:408:90//Hs.17244:W86306  
R-PLACE1010579//EST//0.015:193:63//Hs.67093:C14033  
R-PLACE1010580//ESTs//2.4e-93:445:98//Hs.127325:AA234116  
R-PLACE1010599  
R-PLACE1010616//ESTs//2.9e-101:497:97//Hs.142197:AA573418  
R-PLACE1010622//ESTs//7.1e-23:157:91//Hs.159877:N57895  
R-PLACE1010624//ESTs//1.4e-89:428:98//Hs.116561:AA658475

R-PLACE1010628//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT  
RY !!!! [H.sapiens]//6.4e-74:391:95//Hs.163495:W57637

R-PLACE1010629//ESTs//5.8e-75:359:99//Hs.123630:AI250805

R-PLACE1010630//ESTs//9.5e-101:519:94//Hs.77873:AA731719

R-PLACE1010631//Homo sapiens mRNA for KIAA0530 protein, partial cds//8.3  
e-94:497:93//Hs.10801:AB011102

R-PLACE1010661//ESTs, Highly similar to TESTIS-SPECIFIC PROTEIN PBS13- [Mus musculus]//4.8e-83:467:91//Hs.22383:R51067

R-PLACE1010662//ESTs, Weakly similar to UDP-GLUCOSE:GLYCOPROTEIN GLUCOSYLTRANSFERASE PRECURSOR [D.melanogaster]//8.3e-103:538:94//Hs.105794:AA701659

R-PLACE1010702//Homo sapiens DNA from chromosome 19, BAC 33152//4.8e-46:531:71//Hs.55452:AC003973

R-PLACE1010714//Human organic anion transporting polypeptide (OATP) mRNA, complete cds//0.0074:351:60//Hs.46440:U21943

R-PLACE1010720//Homo sapiens chromosome-associated protein-C (hCAP-C) mRNA, partial cds//1.2e-56:300:95//Hs.50758:AF092564

R-PLACE1010739//Homo sapiens mRNA for oligophrenin 1//2.6e-84:501:88//Hs.158122:AJ001189

R-PLACE1010743

R-PLACE1010761//Homo sapiens okadaic acid-inducible phosphoprotein (OA48-18) mRNA, complete cds//5.2e-94:442:96//Hs.3688:AF069250

R-PLACE1010771//ESTs//3.8e-54:264:99//Hs.27299:AI074024

R-PLACE1010786//ESTs, Highly similar to MYOSIN HEAVY CHAIN IB [Acanthamoeba castellanii]//7.6e-111:575:94//Hs.10260:AI126627

R-PLACE1010800//ESTs//1.9e-109:557:95//Hs.11460:AA057558

R-PLACE1010802//ESTs//0.00021:428:58//Hs.70258:AI091203

R-PLACE1010811//ESTs//7.4e-73:394:93//Hs.48499:AA428896

R-PLACE1010833//ESTs//9.0e-33:274:78//Hs.24391:W27472



R-PLACE1010856//ESTs//5.8e-41:351:81//Hs.17401:W81048  
 R-PLACE1010857//ESTs, Weakly similar to T14B4.2 gene product [C.elegans]  
 //1.4e-71:326:92//Hs.3385:N25917  
 R-PLACE1010870//ESTs//5.8e-57:303:96//Hs.30503:H05090  
 R-PLACE1010877//Homo sapiens mRNA for KIAA0610 protein, partial cds//2.3  
 e-101:501:96//Hs.118087:AB011182  
 R-PLACE1010891  
 R-PLACE1010896//EST//0.0039:249:57//Hs.126090:AA867983  
 R-PLACE1010900//Human Xq28 mRNA, complete cds//3.3e-07:106:76//Hs.20136:  
 U46023  
 R-PLACE1010916//Plasminogen activator inhibitor, type II (arginine-serpi  
 n)//0.25:190:61//Hs.75716:Y00630  
 R-PLACE1010917//ESTs//1.3e-82:452:92//Hs.68055:AA081093  
 R-PLACE1010925//ESTs//1.1e-92:471:95//Hs.17448:AI125479  
 R-PLACE1010926//Homo sapiens mRNA for KIAA0554 protein, partial cds//1.3  
 e-66:402:89//Hs.74750:AB011126  
 R-PLACE1010942//Homo sapiens intersectin short form mRNA, complete cds//  
 8.9e-82:441:93//Hs.66392:AF064244  
 R-PLACE1010944  
 R-PLACE1010947//ESTs//6.7e-15:102:91//Hs.116808:AA211519  
 R-PLACE1010954//Small inducible cytokine A5 (RANTES)//8.8e-51:278:93//Hs  
 .155464:AF088219  
 R-PLACE1010960//ESTs, Highly similar to ACTIN-LIKE PROTEIN 13E [Drosoph  
 ila melanogaster]//1.0e-103:565:92//Hs.23259:AA532437  
 R-PLACE1010965//EST//6.3e-80:447:91//Hs.139529:AA219580  
 R-PLACE1011026//ESTs//4.6e-99:463:99//Hs.149732:AI199846  
 R-PLACE1011032//ESTs//6.3e-56:295:94//Hs.143576:AI147867  
 R-PLACE1011041//ESTs//5.3e-27:168:91//Hs.7936:AA923249  
 R-PLACE1011046//Homo sapiens mRNA for KIAA0581 protein, partial cds//9.4

e-102:563:91//Hs.41143:AB011153  
R-PLACE1011054//EST//1.1e-15:245:69//Hs.112648:AA609135  
R-PLACE1011056//Small inducible cytokine A5 (RANTES)//3.5e-38:285:82//Hs  
.155464:AF088219  
R-PLACE1011057//ESTs//3.5e-81:410:96//Hs.96499:AA252537  
R-PLACE1011090//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT  
RY !!!! [H.sapiens]//1.6e-54:398:84//Hs.108740:W20094  
R-PLACE1011109//EST//1.3e-48:321:85//Hs.146794:AI149478  
R-PLACE1011114//ESTs//5.4e-90:475:94//Hs.69331:AA099587  
R-PLACE1011133//ESTs, Highly similar to 40 KD PROTEIN [Borna disease vi  
rus]//3.0e-105:552:93//Hs.31257:AA875998  
R-PLACE1011143//ESTs//0.40:127:65//Hs.118701:AA420795  
R-PLACE1011160//Homa sapiens mRNA for HRIHFB2038, partial cds//7.7e-97:5  
34:91//Hs.28719:AB015333  
R-PLACE1011165//ESTs//1.0:135:69//Hs.32163:AI374673  
R-PLACE1011185//ESTs, Weakly similar to !!!! ALU CLASS B WARNING ENTRY !  
!!! [H.sapiens]//3.4e-85:442:95//Hs.136910:AA810782  
R-PLACE1011203//EST//0.0047:268:60//Hs.68832:AA088438  
R-PLACE1011219//ESTs//7.6e-96:504:93//Hs.124834:AI138671  
R-PLACE1011221//ESTs//5.2e-23:241:78//Hs.26761:AA203299  
R-PLACE1011229//ESTs//1.9e-90:461:95//Hs.132288:AI027693  
R-PLACE1011263//ESTs//6.6e-56:321:93//Hs.158787:W79602  
R-PLACE1011273//ESTs//0.016:131:65//Hs.140466:AA766772  
R-PLACE1011291//EST//8.7e-47:267:91//Hs.158806:AI376913  
R-PLACE1011296//EST//2.7e-38:225:92//Hs.160934:AI376849  
R-PLACE1011310//ESTs//9.1e-37:196:96//Hs.39328:H71807  
R-PLACE1011325//Human clone 23721 mRNA sequence//0.0012:486:58//Hs.83572  
:U79291  
R-PLACE1011332//ESTs//8.4e-44:217:99//Hs.101365:R60578

R-PLACE1011340//ESTs, Weakly similar to TEICHOIC ACID BIOSYNTHESIS PROTEIN A [Bacillus subtilis] //3.4e-92:452:97//Hs.144194:AA706337

R-PLACE1011375//ESTs//2.2e-35:195:96//Hs.106486:H11376

R-PLACE1011399//ESTs//0.00096:224:67//Hs.151643:AA001194

R-PLACE1011419//ESTs//4.9e-50:267:95//Hs.7045:AA167337

R-PLACE1011433//Homo sapiens mRNA for KIAA0530 protein, partial cds//4.8e-114:600:94//Hs.10801:AB011102

R-PLACE1011452//Homo sapiens mRNA for KIAA0707 protein, partial cds//3.7e-32:310:76//Hs.138488:AB014607

R-PLACE1011465//ESTs//4.5e-86:471:93//Hs.144519:R70887

R-PLACE1011472//Homo sapiens mRNA for KIAA0712 protein, complete cds//2.6e-104:515:96//Hs.111138:AB018255

R-PLACE1011492//ESTs//1.7e-96:488:95//Hs.116555:AA639278

R-PLACE1011503//Homo sapiens clone 23597 mRNA sequence//1.0:193:60//Hs.28197:AF035294

R-PLACE1011520//ESTs//6.8e-99:477:97//Hs.85077:AA968576

R-PLACE1011563//ESTs//1.4e-94:514:92//Hs.16471:AA206421

R-PLACE1011567//EST//2.8e-89:417:100//Hs.149770:AI285985

R-PLACE1011576//Zinc finger protein 91 (HPF7, HTF10)//4.7e-55:267:81//Hs.8597:L11672

R-PLACE1011586//Myosin, heavy polypeptide 11, smooth muscle//0.98:168:61//Hs.78344:AF001548

R-PLACE1011635//ESTs//2.5e-67:332:98//Hs.108194:AA780067

R-PLACE1011641//ESTs//2.5e-71:338:100//Hs.153085:AA993965

R-PLACE1011643//EST//1.9e-18:181:78//Hs.160879:AI361900

R-PLACE1011649//Homo sapiens clone 24432 mRNA sequence//2.5e-73:414:91//Hs.78019:AF070535

R-PLACE1011650//EST//5.8e-18:118:92//Hs.124486:AA846036

R-PLACE1011664//Restin (Reed-Steinberg cell-expressed intermediate filam

ent-associated protein)//0.50:178:62//Hs.31638:X64838  
R-PLACE1011675  
R-PLACE1011682//ESTs//2.4e-90:465:94//Hs.57830:AI312025  
R-PLACE1011719//Human Line-1 repeat mRNA with 2 open reading frames//8.5  
e-57:410:83//Hs.23094:M19503  
R-PLACE1011725//ESTs//2.0e-70:340:98//Hs.161725:AA251392  
R-PLACE1011729//ESTs//7.5e-19:180:79//Hs.119516:AA443426  
R-PLACE1011749//Myelin oligodendrocyte glycoprotein {alternative product  
s} //7.3e-40:361:77//Hs.53217:Z48051  
R-PLACE1011762//Human kpni repeat mrna (cdna clone pcd-kpni-8), 3' end//  
3.0e-60:319:76//Hs.103948:K00627  
R-PLACE1011778//ESTs//8.0e-70:372:94//Hs.46765:AA521080  
R-PLACE1011783//Calcium modulating ligand//8.4e-41:279:85//Hs.13572:AF06  
8179  
R-PLACE1011858//ESTs//2.6e-69:396:91//Hs.55220:D11563  
R-PLACE1011874//Human mRNA for KIAA0033 gene, partial cds//1.2e-53:439:8  
0//Hs.22271:D26067  
R-PLACE1011875//ESTs//9.0e-88:420:98//Hs.70897:AA987648  
R-PLACE1011891//ESTs//3.9e-17:97:100//Hs.84698:AA725913  
R-PLACE1011896//ESTs//2.8e-23:176:84//Hs.121540:AI275497  
R-PLACE1011922//ESTs//6.6e-35:415:73//Hs.10972:AA164268  
R-PLACE1011923//Homo sapiens serum-inducible kinase mRNA, complete cds//  
2.3e-99:546:92//Hs.3838:AF059617  
R-PLACE1011962//ESTs//3.3e-49:294:90//Hs.106800:AI031969  
R-PLACE1011964//ESTs, Weakly similar to LINE-1 REVERSE TRANSCRIPTASE HOM  
OLOG [H.sapiens] //2.6e-06:284:63//Hs.124102:AA701285  
R-PLACE1011982//ESTs//2.9e-51:291:93//Hs.20792:R14890  
R-PLACE1011995//ESTs//4.5e-39:304:81//Hs.138852:AA284247  
R-PLACE1012031//Homo sapiens mRNA for KIAA0713 protein, partial cds//8.0

e-106:540:95//Hs.88756:AB018256  
R-PLACE2000003//ESTs//2.0e-103:488:98//Hs.8341:AA490069  
R-PLACE2000007//ESTs//2.4e-110:564:95//Hs.65135:W89120  
R-PLACE2000011//Homo sapiens clone 614 unknown mRNA, complete sequence//  
4.8e-105:524:95//Hs.21811:AF091080  
R-PLACE2000015//ESTs//7.1e-111:543:96//Hs.32178:AA083211  
R-PLACE2000017//EST//8.2e-46:404:79//Hs.133006:AI049504  
R-PLACE2000021//EST//4.5e-19:221:71//Hs.150830:AI302868  
R-PLACE2000033//Human melanoma antigen recognized by T-cells (MART-1) mRNA//1.6e-43:355:79//Hs.154069:U06452  
R-PLACE2000034//ESTs//2.2e-21:314:70//Hs.107697:W29013  
R-PLACE2000039//H.sapiens mRNA for translin associated protein X//2.9e-4  
5:514:72//Hs.96247:X95073  
R-PLACE2000047//Homo sapiens class-I MHC-restricted T cell associated molecule (CRTAM) mRNA, complete cds//4.1e-45:358:81//Hs.159523:AF001622  
R-PLACE2000050//ESTs//4.5e-65:322:98//Hs.155820:N67652  
R-PLACE2000061//Homo sapiens mRNA for KIAA0575 protein, complete cds//9.  
2e-41:429:72//Hs.153468:AB011147  
R-PLACE2000062//Human mRNA for KIAA0392 gene, partial cds//2.0e-43:296:8  
6//Hs.40100:AB002390  
R-PLACE2000072//Homo sapiens ZNF202 alpha (ZNF202) mRNA, complete cds//6  
.2e-111:550:95//Hs.9443:AF027219  
R-PLACE2000097//Calcium modulating ligand//6.2e-47:372:80//Hs.13572:AF06  
8179  
R-PLACE2000100//ESTs//8.8e-42:281:86//Hs.150727:AI292236  
R-PLACE2000103//ESTs//4.7e-97:518:93//Hs.118727:W26941  
R-PLACE2000111//Homo sapiens ubiquitin hydrolyzing enzyme I (UBH1) mRNA,  
partial cds//0.00043:127:71//Hs.42400:AF022789  
R-PLACE2000115//ESTs//7.8e-93:458:96//Hs.104520:AA481662

R-PLACE2000132//ESTs//3.8e-69:409:91//Hs.98502:AA433988  
R-PLACE2000136//ESTs//6.2e-05:274:61//Hs.114067:AA701558  
R-PLACE2000140//Homo sapiens mRNA for KIAA0562 protein, complete cds//4.7e-44:302:85//Hs.118401:AB011134  
R-PLACE2000164//ESTs//6.3e-106:506:98//Hs.16390:AI052357  
R-PLACE2000170//Small inducible cytokine A5 (RANTES)//3.7e-42:326:79//Hs.155464:AF088219  
R-PLACE2000172//ESTs//9.6e-43:232:94//Hs.6709:AI379778  
R-PLACE2000176//EST//1.6e-24:154:91//Hs.157734:AI360292  
R-PLACE2000187//Human mRNA for KIAA0033 gene, partial cds//2.0e-49:292:90//Hs.22271:D26067  
R-PLACE2000216//ESTs//0.0041:166:64//Hs.159476:AI382378  
R-PLACE2000223//ESTs//0.49:171:60//Hs.86154:AA207191  
R-PLACE2000235//ESTs//2.9e-39:264:85//Hs.136839:H93717  
R-PLACE2000246//NAD(P)H:menadione oxidoreductase//4.0e-44:331:82//Hs.80706:M81600  
R-PLACE2000264//Human mRNA for KIAA0365 gene, partial cds//4.0e-38:311:81//Hs.84123:AB002363  
R-PLACE2000274//ESTs, Weakly similar to dynein-related protein [H.sapiens]//1.9e-87:422:98//Hs.9740:AI004779  
R-PLACE2000302//ESTs, Highly similar to THREONYL-TRNA SYNTHETASE, CYTOSOLIC [Homo sapiens]//4.8e-68:380:92//Hs.107365:AA720664  
R-PLACE2000305//ESTs//2.6e-43:413:75//Hs.118732:AI344055  
R-PLACE2000317//ESTs//2.8e-92:501:92//Hs.28432:R83380  
R-PLACE2000335//ESTs//4.3e-32:300:77//Hs.163035:AA748058  
R-PLACE2000342//Homo sapiens ubiquitin hydrolyzing enzyme I (UBH1) mRNA, partial cds//0.00071:117:73//Hs.42400:AF022789  
R-PLACE2000347//ESTs//1.6e-30:214:86//Hs.135272:AI347618  
R-PLACE2000359//Zinc finger protein 139 (clone pHZ-37)//5.5e-42:288:86//

Hs.140090:U09848  
R-PLACE2000366//Thromboxane A2 receptor//6.7e-53:392:82//Hs.89887:D38081  
R-PLACE2000371//ESTs//3.6e-81:409:97//Hs.155138:AA158731  
R-PLACE2000373//Homo sapiens mRNA for KIAA0734 protein, partial cds//0.8  
9:186:62//Hs.101516:AB018277  
R-PLACE2000379//ESTs//3.4e-10:228:64//Hs.57842:W63781  
R-PLACE2000394//ESTs//6.7e-41:462:74//Hs.107657:AA126814  
R-PLACE2000398//ESTs//4.2e-33:373:74//Hs.155184:AA573189  
R-PLACE2000399  
R-PLACE2000404//ESTs, Highly similar to LEUCYL-TRNA SYNTHETASE, CYTOPLA  
SMIC [*Saccharomyces cerevisiae*]//4.2e-109:540:96//Hs.6762:AA088424  
R-PLACE2000411//ESTs//1.6e-89:459:95//Hs.117589:N25941  
R-PLACE2000419//ESTs, Weakly similar to F25H9.6 [*C.elegans*]//1.6e-97:436  
:95//Hs.24647:W19739  
R-PLACE2000425//Homo sapiens DEC-205 mRNA, complete cds//2.2e-44:287:88/  
/Hs.153563:AF011333  
R-PLACE2000427//ESTs, Weakly similar to coded for by *C. elegans* cDNA CEE  
SI42F [*C.elegans*]//3.0e-113:543:97//Hs.16933:AA976002  
R-PLACE2000433//ESTs//1.8e-46:311:85//Hs.145032:AA343523  
R-PLACE2000435//ESTs//2.9e-33:243:87//Hs.90964:AA393986  
R-PLACE2000438//ESTs//2.8e-09:66:96//Hs.59548:AI279887  
R-PLACE2000450//Human mRNA for KIAA0392 gene, partial cds//3.3e-39:394:7  
4//Hs.40100:AB002390  
R-PLACE2000455//ESTs//1.2e-62:301:99//Hs.151708:AA554714  
R-PLACE2000458//ESTs//6.8e-92:473:96//Hs.115897:AA156638  
R-PLACE2000465//ESTs//1.3e-45:435:76//Hs.141635:N79228  
R-PLACE2000477//ESTs//2.6e-100:536:94//Hs.77822:AA532642  
R-PLACE3000004//ESTs//9.1e-114:558:97//Hs.13035:AA151838  
R-PLACE3000029//Homo sapiens mRNA for KIAA0575 protein, complete cds//6.

3e-64:350:86//Hs.153468:AB011147  
 R-PLACE3000059//EST//0.028:175:61//Hs.159873:R92763  
 R-PLACE3000070//ESTs//3.8e-16:200:74//Hs.138771:N70979  
 R-PLACE3000103//ISLET AMYLOID POLYPEPTIDE PRECURSOR//3.7e-48:468:75//Hs.  
 51048:X68830  
 R-PLACE3000119//ESTs//1.2e-45:330:83//Hs.35254:AI133727  
 R-PLACE3000124//EST//3.1e-75:391:96//Hs.161515:N71739  
 R-PLACE3000136//ESTs//8.3e-18:152:84//Hs.10043:D81792  
 R-PLACE3000142//ESTs//0.047:183:62//Hs.43102:AA131369  
 R-PLACE3000147//ESTs//6.6e-53:310:90//Hs.8230:W07142  
 R-PLACE3000148//EST//1.9e-16:184:76//Hs.146570:AI139815  
 R-PLACE3000155//ESTs//1.2e-19:192:79//Hs.131350:AA805223  
 R-PLACE3000156//ESTs, Highly similar to ENV POLYPROTEIN [Avian spleen n  
 ecrosis virus]//4.8e-36:262:88//Hs.31532:H18272  
 R-PLACE3000157  
 R-PLACE3000158//Small inducible cytokine A5 (RANTES)//8.2e-39:296:81//Hs  
 .155464:AF088219  
 R-PLACE3000160  
 R-PLACE3000169//ESTs//1.5e-64:329:97//Hs.129864:R20798  
 R-PLACE3000194  
 R-PLACE3000197//ESTs//1.4e-38:197:98//Hs.146341:AI269930  
 R-PLACE3000199//ESTs, Highly similar to APOLIPOPROTEIN E PRECURSOR [Sus  
 scrofa]//0.018:261:61//Hs.131370:AA927516  
 R-PLACE3000207//EST//1.3e-15:154:78//Hs.136617:AA630476  
 R-PLACE3000208//ESTs//1.6e-18:151:82//Hs.155498:W27084  
 R-PLACE3000218//ESTs//1.8e-85:463:93//Hs.7849:AI129964  
 R-PLACE3000220//ESTs//6.4e-44:308:84//Hs.136839:H93717  
 R-PLACE3000226//ESTs//1.3e-49:269:95//Hs.9059:AI359014  
 R-PLACE3000230//EST//2.3e-34:258:83//Hs.4382:T02878



R-PLACE3000242//Human trophinin mRNA, complete cds//1.1e-63:546:78//Hs.76313:U04811

R-PLACE3000244//ESTs, Highly similar to NEGATIVE REGULATOR OF MITOSIS [*Emericella nidulans*] //7.5e-110:549:95//Hs.13692:AA632002

R-PLACE3000254//Human mRNA for KIAA0309 gene, partial cds//2.4e-29:174:94//Hs.87908:AB002307

R-PLACE3000271//Human macrophage-derived chemokine precursor (MDC) mRNA, complete cds//2.3e-62:287:82//Hs.97203:U83171

R-PLACE3000276//ESTs//7.5e-07:187:64//Hs.80720:AA031782

R-PLACE3000304//Human 53K isoform of Type II phosphatidylinositol-4-phosphate 5-kinase (PIPK) mRNA, complete cds//4.0e-59:456:80//Hs.108966:U48696

R-PLACE3000310//ISLET AMYLOID POLYPEPTIDE PRECURSOR//6.0e-45:302:86//Hs.51048:X68830

R-PLACE3000320//Interleukin 10//9.6e-42:288:85//Hs.2180:M57627

R-PLACE3000322//ESTs, Highly similar to ARGININOSUCCINATE LYASE [*Homo sapiens*] //5.8e-34:190:95//Hs.114531:N74103

R-PLACE3000331//Homo sapiens mRNA for KIAA0772 protein, complete cds//3.7e-32:239:84//Hs.15519:AB018315

R-PLACE3000339//ESTs//1.3e-109:548:96//Hs.7871:AI041837

R-PLACE3000341//EST//1.1e-11:231:68//Hs.131328:AA922688

R-PLACE3000350//Human mRNA for adipogenesis inhibitory factor//8.0e-40:291:76//Hs.1721:X58377

R-PLACE3000352//EST//1.8e-72:343:100//Hs.144871:AI202380

R-PLACE3000353//ESTs//2.0e-75:395:95//Hs.107260:W52683

R-PLACE3000362//EST//2.8e-80:381:99//Hs.136233:AA261888

R-PLACE3000363

R-PLACE3000365//EST//4.8e-50:307:88//Hs.149580:AI281881

R-PLACE3000373//ESTs//5.8e-60:422:83//Hs.142826:W87430

R-PLACE3000388//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING  
ENTRY !!!! [H.sapiens]//1.0e-35:427:73//Hs.138795:R98534

R-PLACE3000399//ESTs//6.5e-05:162:66//Hs.149440:AI274570

R-PLACE3000400//ESTs//8.3e-05:310:63//Hs.17697:AA287528

R-PLACE3000401//ESTs//4.6e-60:326:80//Hs.139555:N48230

R-PLACE3000402//Homo sapiens clone 24629 mRNA sequence//0.50:227:62//Hs.  
142570:AF052160

R-PLACE3000405//Human HsLIM15 mRNA for HsLim15, complete cds//5.3e-43:31  
5:82//Hs.37181:D64108

R-PLACE3000406//Human high-affinity copper uptake protein (hCTR1) mRNA,  
complete cds//4.4e-47:302:87//Hs.73614:U83460

R-PLACE3000413//ESTs//1.6e-116:571:97//Hs.10235:H93077

R-PLACE3000416//Small inducible cytokine A5 (RANTES)//1.8e-41:300:85//Hs  
.155464:AF088219

R-PLACE3000425//Homo sapiens 4F5S mRNA, complete cds//1.6e-46:307:85//Hs  
.32567:AF073519

R-PLACE3000455//ESTs//1.0:160:64//Hs.156045:AA884461

R-PLACE3000475//Human signal transducing adaptor molecule STAM mRNA, com  
plete cds//6.1e-84:440:92//Hs.153487:U43899

R-PLACE3000477//ESTs//2.4e-113:568:96//Hs.24557:AA142980

R-PLACE4000009//ESTs//1.5e-72:361:96//Hs.10119:AA700227

R-PLACE4000014//Homo sapiens mRNA for KIAA0809 protein, partial cds//8.8  
e-85:433:95//Hs.105399:AB018352

R-PLACE4000034//ESTs//7.0e-110:550:96//Hs.76607:AA156240

R-PLACE4000049//EST//0.028:87:75//Hs.89303:AA284031

R-PLACE4000052//ESTs//5.6e-116:553:98//Hs.19067:AA521292

R-PLACE4000063//ESTs//5.0e-80:388:98//Hs.135028:AI096444

R-PLACE4000089//ESTs//2.3e-97:479:97//Hs.102425:AA807547

R-PLACE4000093//ESTs//1.5e-82:391:99//Hs.160730:AI142739

R-PLACE4000100  
R-PLACE4000106//Homo sapiens mRNA for KIAA0462 protein, partial cds//2.7  
e-98:419:91//Hs.129937:AB007931  
R-PLACE4000128//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING  
ENTRY !!!! [H.sapiens]//3.8e-11:184:71//Hs.154278:N45985  
R-PLACE4000129//Homo sapiens mRNA, chromosome 1 specific transcript KIAA  
0500//5.2e-21:118:100//Hs.118164:AB007969  
R-PLACE4000147//EST//1.6e-23:175:79//Hs.162236:AA551582  
R-PLACE4000156//Homo sapiens mRNA for KIAA0575 protein, complete cds//3.  
0e-47:306:88//Hs.153468:AB011147  
R-PLACE4000192//ESTs, Weakly similar to similar to Human zinc finger pro  
tein(ZNF142) [H.sapiens]//6.7e-31:232:82//Hs.16493:T92186  
R-PLACE4000222//ESTs//2.2e-53:195:85//Hs.141575:AA211734  
R-PLACE4000233//ESTs//2.9e-81:456:93//Hs.124964:R81949  
R-PLACE4000247//Homo sapiens PYRIN (MEFV) mRNA, complete cds//5.5e-72:30  
7:85//Hs.113283:AF018080  
R-PLACE4000250//Small inducible cytokine A5 (RANTES)//7.1e-43:301:83//Hs  
.155464:AF088219  
R-PLACE4000252//EST//1.6e-40:275:85//Hs.162197:AA535216  
R-PLACE4000261//EST//0.0063:384:58//Hs.136284:AA400442  
R-PLACE4000269//ESTs//7.3e-67:345:97//Hs.5000:R44586  
R-PLACE4000270//Homo sapiens apoptotic protease activating factor 1 (Apa  
f-1) mRNA, complete cds//2.1e-37:352:77//Hs.77579:AF013263  
R-PLACE4000300//EST//0.26:103:68//Hs.144438:AA780782  
R-PLACE4000320//EST//2.7e-44:298:85//Hs.162404:AA573131  
R-PLACE4000323//ESTs//8.8e-38:178:79//Hs.155475:AA761454  
R-PLACE4000326//ESTs//7.4e-103:516:96//Hs.55042:AA150460  
R-PLACE4000344//ESTs//9.9e-94:463:96//Hs.100057:AA001414  
R-PLACE4000367//ESTs//0.81:102:73//Hs.107692:H38478

R-PLACE4000369//ESTs//1.5e-69:390:92//Hs.13733:AA418656  
R-PLACE4000379//ESTs//1.3e-67:373:91//Hs.48569:AA905425  
R-PLACE4000387//EST, Moderately similar to !!!! ALU SUBFAMILY SQ WARNING  
ENTRY !!!! [H.sapiens]//1.9e-44:379:78//Hs.152369:AA504818  
R-PLACE4000392//ESTs, Weakly similar to line-1 protein ORF1 [H.sapiens] /  
/2.3e-70:482:83//Hs.140416:AA778649  
R-PLACE4000401//ESTs//1.3e-18:151:84//Hs.150355:AI273502  
R-PLACE4000411//ESTs//1.1e-108:543:96//Hs.23901:AA169780  
R-PLACE4000445//ESTs, Weakly similar to C05D9.6 gene product [C.elegans]  
//2.6e-111:530:98//Hs.12003:AA643063  
R-PLACE4000465//Cytochrome P450, subfamily I (aromatic compound-inducibl  
e), polypeptide 2//8.5e-58:409:72//Hs.1361:M55053  
R-PLACE4000489//ESTs//5.0e-70:342:98//Hs.72865:AI380932  
R-PLACE4000494//ESTs//1.4e-109:525:98//Hs.22539:AI334210  
R-PLACE4000522//ESTs//6.3e-88:471:93//Hs.8121:AA521290  
R-PLACE4000548//ESTs//3.3e-86:441:96//Hs.5070:AA149527  
R-PLACE4000558//Human putative monocarboxylate transporter (MCT) mRNA, c  
omplete cds//5.7e-46:425:76//Hs.23590:U59185  
R-THYRO1000026//ESTs//2.6e-42:331:82//Hs.137875:AA993532  
R-THYRO1000034//ESTs//2.1e-43:214:100//Hs.153018:AI243524  
R-THYRO1000035//ESTs//7.6e-52:325:90//Hs.49817:AA001249  
R-THYRO1000040//ESTs//1.7e-94:459:98//Hs.48712:AI027889  
R-THYRO1000070//ESTs//6.7e-43:283:86//Hs.37573:H59651  
R-THYRO1000072//ESTs//1.3e-57:313:96//Hs.127827:H13438  
R-THYRO1000085//ESTs//1.1e-90:439:98//Hs.150539:AA908435  
R-THYRO1000092//Human mRNA for KIAA0355 gene, complete cds//1.3e-41:344:  
79//Hs.153014:AB002353  
R-THYRO1000107//Interleukin 10//2.8e-43:292:84//Hs.2180:M57627  
R-THYRO1000111//ESTs, Highly similar to LINE-1 REVERSE TRANSCRIPTASE HO

MOLOG [Homo sapiens] //1.0e-52:413:80//Hs.140385:AA773359  
R-THYRO1000121//EST//0.24:78:74//Hs.156632:AI345108  
R-THYRO1000124//ESTs//2.8e-86:428:96//Hs.141634:AI122764  
R-THYRO1000129//Homo sapiens TED protein (TED) mRNA, complete cds//6.8e-90:449:96//Hs.87619:AF087142  
R-THYRO1000132//ESTs, Moderately similar to !!!! ALU SUBFAMILY SC WARNING ENTRY !!!! [H.sapiens] //5.2e-49:486:77//Hs.24164:N95217  
R-THYRO1000156//ESTs//6.1e-36:344:75//Hs.70279:AA757426  
R-THYRO1000163//Homo sapiens LIM protein mRNA, complete cds//4.8e-38:278:84//Hs.154103:AF061258  
R-THYRO1000173//ESTs, Highly similar to CLATHRIN COAT ASSEMBLY PROTEIN AP47 [Mus musculus] //1.1e-111:554:96//Hs.18894:AA910946  
R-THYRO1000186//ESTs//1.0e-44:339:83//Hs.155184:AA573189  
R-THYRO1000187//Small inducible cytokine A5 (RANTES)//1.1e-41:305:81//Hs.155464:AF088219  
R-THYRO1000190//Small inducible cytokine A5 (RANTES)//2.3e-44:301:85//Hs.155464:AF088219  
R-THYRO1000197//Homo sapiens mRNA for poly(A)-specific ribonuclease//3.6e-110:535:97//Hs.43445:AJ005698  
R-THYRO1000199//Homo sapiens mRNA for KIAA0652 protein, complete cds//4.3e-115:559:97//Hs.79672:AB014552  
R-THYRO1000206//ESTs//3.1e-90:507:90//Hs.32456:W29063  
R-THYRO1000221//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENTRY !!!! [H.sapiens] //1.1e-72:357:98//Hs.140002:AA635349  
R-THYRO1000241//Homo sapiens mRNA for KIAA0688 protein, complete cds//7.8e-69:524:82//Hs.141874:AB014588  
R-THYRO1000242//ESTs//4.2e-27:222:85//Hs.77554:W87927  
R-THYRO1000253//Sialophorin (gpL115, leukosialin, CD43)//7.3e-40:318:80//Hs.80738:X52075

R-THYRO1000270//ESTs//1.9e-99:531:94//Hs.17767:N62925  
 R-THYRO1000279//EST//2.7e-54:266:99//Hs.149527:AI280674  
 R-THYRO1000288//Homo sapiens mRNA for Hs Ste24p, complete cds//3.5e-100:  
 566:91//Hs.25846:AB016068  
 R-THYRO1000320//POLYPOSIS LOCUS PROTEIN 1//1.0:321:58//Hs.74648:M73547  
 R-THYRO1000327//Autocrine motility factor receptor//9.2e-54:289:93//Hs.8  
 0731:M63175  
 R-THYRO1000343//Homo sapiens mRNA for KIAA0790 protein, partial cds//3.4  
 e-113:559:96//Hs.12002:AB018333  
 R-THYRO1000358//Human selenium-binding protein (hSBP) mRNA, complete cds  
 //1.5e-48:317:87//Hs.7833:U29091  
 R-THYRO1000368//ESTs//4.7e-88:430:98//Hs.146085:AA021064  
 R-THYRO1000381//ESTs//1.0:253:57//Hs.128783:AA436250  
 R-THYRO1000387//Homo sapiens ubiquitin conjugating enzyme G2 (UBE2G2) mR  
 NA, complete cds//4.6e-69:294:84//Hs.151614:AF032456  
 R-THYRO1000394//Thromboxane A2 receptor//4.1e-40:232:87//Hs.89887:D38081  
 R-THYRO1000395//ESTs//3.3e-20:160:83//Hs.101570:AA505429  
 R-THYRO1000401//ESTs//1.3e-109:516:99//Hs.78524:AI140601  
 R-THYRO1000438//ESTs//2.1e-48:360:83//Hs.141203:H52638  
 R-THYRO1000452//ESTs, Weakly similar to No definition line found [C.eleg  
 ans] //8.5e-40:239:90//Hs.84009:AI309761  
 R-THYRO1000471//ESTs//3.3e-36:302:80//Hs.70279:AA757426  
 R-THYRO1000484//Homo sapiens mRNA for KIAA0737 protein, complete cds//2.  
 2e-49:479:75//Hs.17630:AB018280  
 R-THYRO1000488//Homa sapiens mRNA for HRIHFB2038, partial cds//4.1e-89:4  
 71:94//Hs.28719:AB015333  
 R-THYRO1000501//ESTs//1.5e-46:287:89//Hs.125300:R62360  
 R-THYRO1000502//ESTs//1.7e-08:63:96//Hs.116319:AI208005  
 R-THYRO1000505//ESTs, Weakly similar to KIAA0281 [H.sapiens] //3.9e-57:28

6:96//Hs.105861:AI206965  
R-THYRO1000558//ESTs//1.7e-95:454:99//Hs.125063:AA648511  
R-THYRO1000569//ESTs//3.2e-89:463:94//Hs.20555:W22193  
R-THYRO1000570//ESTs//2.8e-97:471:97//Hs.8245:AA115485  
R-THYRO1000585//Homo sapiens protein associated with Myc mRNA, complete  
cds//2.6e-108:533:97//Hs.151411:AF075587  
R-THYRO1000596//ESTs//3.1e-99:527:94//Hs.6084:AA045247  
R-THYRO1000602//EST//6.9e-50:381:83//Hs.161917:AA483223  
R-THYRO1000605//ESTs, Weakly similar to monocytic leukaemia zinc finger  
protein [H.sapiens]//1.2e-96:483:96//Hs.21907:N24415  
R-THYRO1000625//ESTs//5.6e-36:257:84//Hs.139657:AA191742  
R-THYRO1000637  
R-THYRO1000641//ESTs, Weakly similar to ERYTHROCYTE BAND 7 INTEGRAL MEMB  
RANE PROTEIN [H.sapiens]//4.9e-46:245:95//Hs.97398:AA398634  
R-THYRO1000658//ESTs//5.8e-48:281:90//Hs.142259:AA828840  
R-THYRO1000662//ESTs//1.5e-82:389:99//Hs.155573:AA487384  
R-THYRO1000666//ESTs//1.4e-26:179:88//Hs.98382:AA779866  
R-THYRO1000676//EST//6.4e-05:88:77//Hs.133424:AI061063  
R-THYRO1000684//ESTs//1.9e-69:374:94//Hs.144617:R77109  
R-THYRO1000699//ESTs//1.7e-58:394:86//Hs.26373:AA700713  
R-THYRO1000712  
R-THYRO1000734//EST//2.0e-06:95:73//Hs.156201:AA724287  
R-THYRO1000748//EST//4.1e-12:155:74//Hs.118694:AA148713  
R-THYRO1000756//ESTs, Weakly similar to CMP-N-ACETYLNEURAMINATE-BETA-GAL  
ACTOSAMIDE-ALPHA-2,3-SIALYLTRANSFERASE [H.sapiens]//8.1e-82:497:87//Hs.1  
09672:W22624  
R-THYRO1000777  
R-THYRO1000783//EST//5.6e-100:470:99//Hs.123515:AA812932  
R-THYRO1000787//EST//8.0e-34:175:99//Hs.99607:AA463897

R-THYRO1000793//ESTs//2.2e-106:505:99//Hs.50929:AA443144  
R-THYRO1000796//ESTs//4.3e-44:445:75//Hs.55855:AA621381  
R-THYRO1000805//EST//2.6e-32:407:67//Hs.123424:AA813594  
R-THYRO1000815//Human mRNA for KIAA0033 gene, partial cds//2.0e-56:307:87//Hs.22271:D26067  
R-THYRO1000829  
R-THYRO1000843//Interleukin 10//1.1e-44:285:87//Hs.2180:M57627  
R-THYRO1000852//EST//2.3e-20:157:85//Hs.149580:AI281881  
R-THYRO1000855//ESTs//2.6e-44:359:81//Hs.140329:AA714011  
R-THYRO1000865//Protein kinase, interferon-inducible double stranded RNA dependent//2.8e-44:374:79//Hs.73821:M35663  
R-THYRO1000895//ESTs//1.0e-32:196:85//Hs.138630:H97871  
R-THYRO1000916//ESTs//4.6e-99:492:96//Hs.152442:AA528234  
R-THYRO1000926//Homo sapiens cAMP-specific phosphodiesterase 8B (PDE8B) mRNA, partial cds//3.1e-110:566:94//Hs.78106:AF079529  
R-THYRO1000934//ESTs//7.4e-102:535:95//Hs.58194:W72182  
R-THYRO1000951//ESTs//4.2e-11:91:89//Hs.6278:T15859  
R-THYRO1000952//ESTs//3.9e-93:489:94//Hs.48928:AA211761  
R-THYRO1000974//Homo sapiens ribosomal protein L33-like protein mRNA, complete cds//1.1e-60:321:95//Hs.14454:AF047440  
R-THYRO1000975//EST//9.8e-49:303:89//Hs.149580:AI281881  
R-THYRO1000983//ESTs, Highly similar to UBIQUITIN-CONJUGATING ENZYME E2-17 KD 11 [Arabidopsis thaliana]//1.6e-90:474:93//Hs.106616:AI027524  
R-THYRO1000984//ESTs//5.9e-97:481:96//Hs.142457:AI202777  
R-THYRO1000988//EST//3.5e-42:241:83//Hs.162404:AA573131  
R-THYRO1001003//ESTs, Weakly similar to ubiquitin-conjugating enzyme [H. sapiens]//3.0e-57:341:91//Hs.44049:AA521489  
R-THYRO1001031//ESTs//5.5e-47:322:85//Hs.136839:H93717  
R-THYRO1001033//ESTs//5.7e-89:427:98//Hs.71508:AA809070



R-THYRO1001062//EST//1.5e-46:291:89//Hs.161917:AA483223  
R-THYRO1001093//ESTs//2.7e-80:468:90//Hs.124601:AA203497  
R-THYRO1001100  
R-THYRO1001120//ESTs, Moderately similar to fractionated X-irradiation-induced 29 thymoma [M.musculus]//6.6e-86:491:89//Hs.89135:AI138834  
R-THYRO1001121//Homo sapiens mRNA for beta-tubulin folding cofactor D//2.6e-82:429:94//Hs.12570:AJ006417  
R-THYRO1001133//ESTs//2.9e-39:242:90//Hs.152340:AA521399  
R-THYRO1001134//ESTs//1.8e-102:521:95//Hs.108408:N31922  
R-THYRO1001142//ESTs//0.26:84:69//Hs.153434:AI287853  
R-THYRO1001173//Human mRNA for KIAA0238 gene, partial cds//0.0012:305:62//Hs.82042:D87075  
R-THYRO1001177  
R-THYRO1001189//H.sapiens F11 mRNA//1.5e-59:260:83//Hs.159639:X77744  
R-THYRO1001204//ESTs, Weakly similar to TH1 protein [D.melanogaster]//1.0e-75:431:91//Hs.5184:AA709151  
R-THYRO1001213//ESTs//1.3e-75:409:92//Hs.140213:AA828932  
R-THYRO1001262//Human kpni repeat mrna (cdna clone pcd-kpni-4), 3' end//1.3e-48:349:83//Hs.139107:K00629  
R-THYRO1001271//PUTATIVE PROTEIN PHOSPHATASE 2C//1.0:128:64//Hs.118728:D13640  
R-THYRO1001290//ESTs//2.1e-89:424:99//Hs.118152:AA702561  
R-THYRO1001313//ESTs//3.5e-17:139:87//Hs.15827:H16269  
R-THYRO1001320//ESTs//1.4e-61:403:79//Hs.139555:N48230  
R-THYRO1001321//Hypoxanthine phosphoribosyltransferase 1 (Lesch-Nyhan syndrome)//8.5e-05:326:60//Hs.82314:M31642  
R-THYRO1001322//ESTs//0.16:422:59//Hs.23876:AA082935  
R-THYRO1001347//ESTs, Weakly similar to C35A5.8 [C.elegans]//1.1e-106:562:94//Hs.15032:AA774250

R-THYRO1001363//ESTs//1.4e-99:508:95//Hs.5028:D51033  
R-THYRO1001365  
R-THYRO1001374  
R-THYRO1001401//Human HsLIM15 mRNA for HsLim15, complete cds//2.5e-48:46  
7:75//Hs.37181:D64108  
R-THYRO1001403//Interleukin 10//2.1e-46:305:85//Hs.2180:M57627  
R-THYRO1001405//ESTs//4.8e-25:197:84//Hs.6907:W72733  
R-THYRO1001406//EST//0.0023:117:66//Hs.162931:AA633197  
R-THYRO1001411//ESTs//6.1e-77:421:93//Hs.22973:R40979  
R-THYRO1001426//Homo sapiens mRNA, chromosome 1 specific transcript KIAA  
0508//9.1e-49:305:86//Hs.159187:AB007977  
R-THYRO1001434//ESTs//0.40:161:61//Hs.161993:AA503172  
R-THYRO1001458//ESTs, Moderately similar to !!!! ALU SUBFAMILY SC WARNIN  
G ENTRY !!!! [H.sapiens]//1.7e-05:159:66//Hs.104239:AA488082  
R-THYRO1001480//Small inducible cytokine A5 (RANTES)//1.3e-40:331:79//Hs  
.155464:AF088219  
R-THYRO1001487//Homo sapiens mRNA for KIAA0563 protein, complete cds//2.  
1e-17:134:76//Hs.15731:AB011135  
R-THYRO1001534//ESTs//4.6e-96:447:100//Hs.135204:AI093110  
R-THYRO1001537//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT  
RY !!!! [H.sapiens]//5.0e-33:304:80//Hs.108740:W20094  
R-THYRO1001541//Human peptide transporter (HPEPT1) mRNA, complete cds//9  
.0e-49:427:76//Hs.2217:U21936  
R-THYRO1001559//ESTs//0.99:210:62//Hs.33619:AA021594  
R-THYRO1001570//ESTs//4.9e-48:287:91//Hs.27131:AA442413  
R-THYRO1001573//ESTs//2.1e-87:446:95//Hs.143669:AA621958  
R-THYRO1001584//ESTs//1.5e-64:354:95//Hs.146222:AA397741  
R-THYRO1001595//ESTs//5.7e-39:366:78//Hs.22562:R54247  
R-THYRO1001602//Insulin-like growth factor 1 (somatomedia C)//7.4e-12:28

8:67//Hs.85112:X57025

R-THYRO1001605//Human GS2 mRNA, complete cds//6.9e-49:359:83//Hs.264:U03  
886

R-THYRO1001617//Homo sapiens peroxisomal acyl-CoA:dihydroxyacetonephosph  
ate acyltransferase (DHAPAT) mRNA, complete cds//1.3e-82:434:93//Hs.1248  
2:AJ002190

R-THYRO1001637//Homo sapiens KIAA0414 mRNA, partial cds//7.1e-58:331:83/  
/Hs.127649:AB007874

R-THYRO1001656//ESTs//3.8e-19:209:75//Hs.92186:AI080282

R-THYRO1001661//ESTs//1.4e-56:323:91//Hs.24984:AA534446

R-THYRO1001671//Homo sapiens mRNA for 2'-5' oligoadenylate synthetase 59  
kDa isoform//1.6e-111:562:95//Hs.118633:AJ225089

R-THYRO1001673//Homo sapiens mRNA, chromosome 1 specific transcript KIAA  
0488//1.0e-17:246:73//Hs.67619:AB007957

R-THYRO1001703//ESTs//1.1e-39:142:97//Hs.110748:AI341726

R-THYRO1001706//ESTs//2.2e-42:214:99//Hs.112536:AI147691

R-THYRO1001721

R-THYRO1001738//ESTs, Weakly similar to ZK1128.6 [C.elegans]//1.7e-10:14  
7:77//Hs.158196:R53184

R-THYRO1001745//ELK1, member of ETS oncogene family//1.8e-12:282:65//Hs.  
116549:AL009172

R-THYRO1001746//EST//0.0073:226:61//Hs.146544:AI125323

R-THYRO1001772//ESTs//8.2e-100:495:97//Hs.144993:AA243474

R-THYRO1001793//ESTs//2.5e-89:430:97//Hs.58127:AA534224

R-THYRO1001809//ESTs//1.0e-41:327:80//Hs.146811:AA410788

R-THYRO1001854//Homo sapiens mRNA, chromosome 1 specific transcript KIAA  
0487//5.7e-38:242:83//Hs.92381:AB007956

R-THYRO1001895//ESTs//1.7e-08:213:64//Hs.156056:AI352123

R-THYRO1001907//ESTs, Moderately similar to !!!! ALU SUBFAMILY SC WARNIN

G ENTRY !!!! [H.sapiens] //3.7e-41:362:79//Hs.139007:H74314  
R-VESEN1000122  
R-Y79AA1000013//ESTs//0.99:233:57//Hs.132216:AA923289  
R-Y79AA1000033//EST//1.9e-62:324:95//Hs.157692:AI359321  
R-Y79AA1000037//ESTs//6.1e-47:234:98//Hs.30773:AA557178  
R-Y79AA1000059//Homo sapiens mRNA for KIAA0640 protein, partial cds//2.8  
e-51:330:89//Hs.153026:AB014540  
R-Y79AA1000065//ESTs//2.0e-91:497:94//Hs.37759:H59629  
R-Y79AA1000131//EST//2.3e-16:184:75//Hs.141501:N50792  
R-Y79AA1000181//ESTs, Weakly similar to No definition line found [C.eleg  
ans] //2.4e-110:553:95//Hs.23159:AA113849  
R-Y79AA1000202//Human mRNA for KIAA0169 gene, partial cds//0.094:185:62/  
/Hs.79414:D79991  
R-Y79AA1000214//ESTs//1.7e-93:495:94//Hs.11673:W68103  
R-Y79AA1000230//ESTs//3.5e-114:553:98//Hs.47125:AI421812  
R-Y79AA1000231//ESTs//1.1e-106:526:97//Hs.82856:AI246624  
R-Y79AA1000258//ESTs//1.5e-99:490:97//Hs.6459:AI092936  
R-Y79AA1000268//Human mRNA for KIAA0365 gene, partial cds//1.3e-44:320:8  
4//Hs.84123:AB002363  
R-Y79AA1000313//ESTs//1.7e-105:558:93//Hs.18851:AA857826  
R-Y79AA1000328//ESTs//1.9e-76:448:91//Hs.16470:AA121635  
R-Y79AA1000342//ESTs, Weakly similar to MATRIN 3 [H.sapiens] //2.0e-37:23  
9:88//Hs.23476:AA401210  
R-Y79AA1000346//ESTs//7.9e-12:139:76//Hs.115987:AA483808  
R-Y79AA1000349//ESTs, Moderately similar to spermatid perinuclear RNA-bi  
nding protein Spnr [M.musculus] //4.4e-66:339:97//Hs.8215:AA521150  
R-Y79AA1000355//ESTs, Moderately similar to !!!! ALU SUBFAMILY SC WARNIN  
G ENTRY !!!! [H.sapiens] //3.2e-44:279:88//Hs.139007:H74314  
R-Y79AA1000368//ESTs//3.8e-97:513:94//Hs.68090:AA641018

R-Y79AA1000405//ESTs//4.4e-47:267:94//Hs.125304:R51613  
R-Y79AA1000410//ESTs//7.4e-49:359:82//Hs.158107:AA707758  
R-Y79AA1000420//EST//0.17:99:69//Hs.160859:AI352292  
R-Y79AA1000469//ESTs, Highly similar to ancient ubiquitous 46 kDa protein AUP46 precursor [M.musculus]//3.1e-60:362:88//Hs.6381:AI188509  
R-Y79AA1000480//ESTs//1.0e-75:433:91//Hs.78110:AA741320  
R-Y79AA1000538//EST//7.9e-48:307:87//Hs.149580:AI281881  
R-Y79AA1000539//Human kinesin-like spindle protein HKSP (HKSP) mRNA, complete cds//0.95:172:62//Hs.41723:U37426  
R-Y79AA1000540//ESTs//1.5e-97:534:93//Hs.67991:AA147848  
R-Y79AA1000560//ESTs, Highly similar to ALPHA-ADAPTIN [Rattus norvegicus]//8.2e-97:482:97//Hs.19121:AI125280  
R-Y79AA1000574//ESTs, Weakly similar to M04B2.4 [C.elegans]//1.3e-107:564:93//Hs.16361:AI147455  
R-Y79AA1000627//Homo sapiens zinc finger protein (ZF5128) mRNA, complete cds//3.4e-99:517:94//Hs.60580:AF060503  
R-Y79AA1000705//ESTs, Weakly similar to HYPOTHETICAL 128.5 KD HELICASE I IN ATS1-TPD3 INTERGENIC REGION [Saccharomyces cerevisiae]//8.1e-27:140:100//Hs.129049:H28818  
R-Y79AA1000734//Homo sapiens peroxisomal biogenesis factor (PEX11b) mRNA, complete cds//8.7e-114:586:95//Hs.83023:AF093670  
R-Y79AA1000748//ESTs, Weakly similar to HYPOTHETICAL 61.3 KD PROTEIN F25 B5.5 IN CHROMOSOME III [C.elegans]//9.8e-111:563:95//Hs.19845:AI005330  
R-Y79AA1000752//Homo sapiens (huc) mRNA, complete cds//0.97:235:59//Hs.1701:L26405  
R-Y79AA1000774//ESTs//5.9e-109:559:95//Hs.17138:N91463  
R-Y79AA1000782//Human mRNA for KIAA0246 gene, partial cds//1.6e-18:107:100//Hs.84753:D87433  
R-Y79AA1000784//EST//0.80:87:67//Hs.158558:AI368359

R-Y79AA1000794//ESTs//2.7e-99:498:96//Hs.25441:AA580512  
 R-Y79AA1000800//ESTs//1.2e-97:532:93//Hs.77822:AA532642  
 R-Y79AA1000802//Carboxypeptidase E//0.018:354:59//Hs.75360:X51405  
 R-Y79AA1000805  
 R-Y79AA1000824//ESTs//0.99:276:61//Hs.153992:AA280227  
 R-Y79AA1000827//ESTs//1.2e-55:326:92//Hs.158127:AI334650  
 R-Y79AA1000850//Homo sapiens small optic lobes homolog (SOLH) mRNA, complete cds//0.016:386:59//Hs.55836:U85647  
 R-Y79AA1000962//EST//0.024:177:63//Hs.25214:R37079  
 R-Y79AA1000968  
 R-Y79AA1000969//ESTs//2.9e-70:251:98//Hs.120858:AA417181  
 R-Y79AA1000976//ESTs//7.8e-56:299:95//Hs.120125:M86049  
 R-Y79AA1000985  
 R-Y79AA1001023//ESTs//5.7e-66:379:90//Hs.64616:W22851  
 R-Y79AA1001041//ESTs//8.6e-06:54:100//Hs.8980:AA629067  
 R-Y79AA1001048//ESTs//4.4e-97:461:99//Hs.7010:AA837407  
 R-Y79AA1001061//ESTs//3.8e-105:493:99//Hs.128419:AI271325  
 R-Y79AA1001068//Homo sapiens mRNA for KIAA0563 protein, complete cds//4.8e-53:279:83//Hs.15731:AB011135  
 R-Y79AA1001077//ESTs//1.9e-51:339:87//Hs.11197:AA309047  
 R-Y79AA1001078//ESTs//8.3e-98:528:92//Hs.24608:AA161260  
 R-Y79AA1001105//ESTs//6.0e-77:393:96//Hs.30837:H08155  
 R-Y79AA1001145//ESTs//1.7e-13:285:64//Hs.128259:AA343015  
 R-Y79AA1001167  
 R-Y79AA1001177//EST//1.2e-05:92:76//Hs.65277:T15884  
 R-Y79AA1001185  
 R-Y79AA1001211//ESTs//1.3e-70:344:97//Hs.49760:AA741051  
 R-Y79AA1001216//ESTs//5.8e-63:416:88//Hs.8595:W60933  
 R-Y79AA1001228//ESTs//9.3e-101:483:98//Hs.13916:AI025750

R-Y79AA1001233//EST//0.00027:232:62//Hs.132431:AA909674  
R-Y79AA1001236//Homo sapiens mRNA for JM23 protein, complete coding sequence (clone IMAGE 34581 and IMAGE 45355 and LLNLc110I133Q7 (RZPD Berlin) )//1.1e-110:549:95//Hs.23170:AJ005892  
R-Y79AA1001281//ESTs//3.6e-98:466:99//Hs.104442:AA481271  
R-Y79AA1001299//Human Inil mRNA, complete cds//9.6e-25:133:100//Hs.155626:U04847  
R-Y79AA1001312//ESTs//3.4e-92:454:97//Hs.127319:AI191149  
R-Y79AA1001323//ESTs//1.6e-67:422:89//Hs.118559:AA887084  
R-Y79AA1001384//ESTs//3.1e-104:496:98//Hs.153692:AA604143  
R-Y79AA1001391//ESTs//2.2e-77:418:94//Hs.118608:AA101819  
R-Y79AA1001394//ESTs//2.1e-78:409:95//Hs.23413:AA579859  
R-Y79AA1001402//EST//9.3e-08:128:75//Hs.141607:N63891  
R-Y79AA1001493//ESTs, Highly similar to UBIQUITIN-CONJUGATING ENZYME E2 -17 KD 11 [Arabidopsis thaliana]//4.4e-109:553:95//Hs.106616:AI027524  
R-Y79AA1001511//ESTs//4.9e-49:271:92//Hs.109045:AA523704  
R-Y79AA1001533//ESTs, Moderately similar to RNA polymerase I associated factor [M.musculus]//6.2e-46:260:94//Hs.24884:AA176812  
R-Y79AA1001541//EST//0.62:126:67//Hs.137020:AA868563  
R-Y79AA1001548//PHOSPHATIDYLINOSITOL 4-KINASE ALPHA//3.5e-95:517:91//Hs.76987:AF012872  
R-Y79AA1001555//Collagen, type XI, alpha 1//1.0:157:64//Hs.82772:J04177  
R-Y79AA1001585//ESTs//1.9e-90:430:98//Hs.48333:AA704508  
R-Y79AA1001594//ESTs//9.6e-23:122:100//Hs.63795:AI126237  
R-Y79AA1001603//ESTs//1.0e-50:193:100//Hs.25635:AI336204  
R-Y79AA1001613//ESTs, Weakly similar to zinc finger protein [H.sapiens]//7.2e-81:400:97//Hs.13323:AA897542  
R-Y79AA1001647//ESTs//6.8e-92:479:95//Hs.154270:N26486  
R-Y79AA1001665//ESTs, Weakly similar to 50S RIBOSOMAL PROTEIN L20 [E.col

i) //2.5e-19:112:97//Hs.26252:AA643235  
R-Y79AA1001679//ESTs, Highly similar to LAMBDA-CRYSTALLIN [Oryctolagus cuniculus] //9.7e-99:553:92//Hs.108896:R54040  
R-Y79AA1001692  
R-Y79AA1001696//ESTs//1.4e-84:478:91//Hs.6606:AA211783  
R-Y79AA1001705//ESTs//6.7e-107:546:95//Hs.106805:AA418490  
R-Y79AA1001711//Human DNA sequence from clone 1119D9 on chromosome 20p12 . Contains part of a gene for a PAK1 LIKE Serine/Threonine-Protein Kinase and part of the PLCB4 gene for Phospholipase C, beta (1-Phosphatidylinositol -4,5-Bisphosphate Phosphodiesterase Beta 4). Contains ESTs, STSS and GSSs//0.0085:251:63//Hs.21864:AL031652  
R-Y79AA1001781//ESTs, Weakly similar to partial CDS [C.elegans] //9.4e-87:427:97//Hs.18645:AI023798  
R-Y79AA1001805//ESTs//1.1e-112:558:97//Hs.109755:AA180809  
R-Y79AA1001827//ESTs, Weakly similar to Similar to S.cerevisiae YD9335.0 3c protein [H.sapiens] //8.1e-95:530:91//Hs.72444:W23217  
R-Y79AA1001846//EST//2.8e-41:312:81//Hs.162236:AA551582  
R-Y79AA1001848//Human adhalin (DAG2) mRNA, complete cds//0.54:221:58//Hs.99931:L34355  
R-Y79AA1001866//ESTs//2.2e-102:498:97//Hs.130683:AI278630  
R-Y79AA1001874//ESTs//1.9e-76:377:98//Hs.79707:AA354094  
R-Y79AA1001875//ESTs//0.64:152:63//Hs.156159:AI333652  
R-Y79AA1001923//EST//0.19:180:58//Hs.148290:AA908404  
R-Y79AA1002027//ESTs//1.6e-104:497:98//Hs.21275:N73275  
R-Y79AA1002083//Homo sapiens mRNA for KIAA0563 protein, complete cds//0.69:93:73//Hs.15731:AB011135  
R-Y79AA1002089//Homo sapiens PYRIN (MEFV) mRNA, complete cds//1.1e-46:392:80//Hs.113283:AF018080  
R-Y79AA1002093//Homo sapiens GT198 mRNA, complete ORF//1.2e-12:80:100//H



s.78185:L38933

R-Y79AA1002103//ESTs//1.3e-52:535:76//Hs.142167:AI417785

R-Y79AA1002115//ESTs//4.2e-101:519:96//Hs.23977:AA115275

R-Y79AA1002125//ESTs//9.8e-68:363:94//Hs.72085:AA193399

R-Y79AA1002139//ESTs//1.2e-100:498:96//Hs.72020:AA149858

R-Y79AA1002204//ESTs//2.1e-83:434:95//Hs.22979:R43725

R-Y79AA1002208//ESTs//1.7e-55:478:76//Hs.154554:AA552715

R-Y79AA1002209//ESTs, Weakly similar to similar to tyrosyl-tRNA synthetase. [C.elegans] //3.5e-108:553:95//Hs.50441:AA747428

R-Y79AA1002210//ESTs//4.2e-16:92:100//Hs.54862:AA248349

R-Y79AA1002211//ESTs, Weakly similar to PHOSPHATIDYLETHANOLAMINE-BINDING PROTEIN [H.sapiens] //6.5e-86:518:90//Hs.25682:AA857843

R-Y79AA1002220//EST//1.3e-68:326:100//Hs.131052:AI016274

R-Y79AA1002229//ESTs//1.9e-98:467:98//Hs.132002:AI039977

R-Y79AA1002234//Homo sapiens mRNA for KIAA0692 protein, partial cds//2.0e-118:564:98//Hs.100729:AB014592

R-Y79AA1002246//ESTs, Weakly similar to PROTEIN KINASE C, BRAIN ISOZYME [D.melanogaster] //9.0e-102:507:96//Hs.25895:AI341537

R-Y79AA1002258//Homo sapiens mRNA for KIAA0655 protein, partial cds//2.4e-93:453:97//Hs.96731:AB014555

R-Y79AA1002298//ESTs//0.022:241:62//Hs.118272:N90288

R-Y79AA1002307//Homo sapiens mRNA for KIAA0634 protein, partial cds//8.1e-110:403:99//Hs.30898:AB014534

R-Y79AA1002311//EST//2.6e-27:214:85//Hs.144721:AI187985

R-Y79AA1002351//ESTs//5.6e-100:489:97//Hs.30318:AA913371

R-Y79AA1002361

R-Y79AA1002399//ESTs//0.029:149:65//Hs.43872:N26908

R-Y79AA1002407//ESTs//2.8e-117:552:99//Hs.99519:AI042000

R-Y79AA1002416//ESTs//2.6e-107:531:96//Hs.6716:AA502753

R-Y79AA1002431//EST//6.6e-23:128:98//Hs.128417:AA975026

R-Y79AA1002433//ESTs, Highly similar to CELL DIVISION CONTROL PROTEIN 6  
8 [Saccharomyces cerevisiae]//4.4e-62:390:88//Hs.143930:AI207821

R-Y79AA1002472//ESTs//1.1e-39:234:78//Hs.117969:H94870

R-Y79AA1002482//ESTs//3.4e-45:312:85//Hs.146811:AA410788

R-Y79AA1002487//ESTs//1.7e-80:427:94//Hs.49210:N66499

【 0 2 9 6 】

【配列表】

# SEQUENCE LISTING

<110> Helix Research Institute

<120> Primers for Synthesis of Full Length cDNAs and there uses.

<130> H1-107

<140>

<141>

<160> 10467

<170> PatentIn Ver. 2.0

<210> 1

<211> 855

<212> DNA

<213> Homo sapiens

<400> 1

gcgcttttca ctgacaggcg ctgttcccca cagccagcgc cgcccgccac gtcccagctc 60  
 tgggccaacg gagctgcgcg gcgggtgacc tttccgagcc cagcgcgatg acggctcctt 120  
 gctcccagcc ggcgagctt cctggacgcc gccagctcgg gctgggtgccg tttccgccgc 180  
 cgccgccgcg gacgccgtg ctgtggctgc tgctgctgct gctggccgcc gtggcgccgg 240  
 cgcgcggtg ggagagcgga gacctggagt tgtttgactt agtggaggag gtgcagctca 300  
 acttctacca gttcctcggg gtgcagcagg atgcatcatc tgcagacatc agaaaagcat 360  
 atcgtaagct ttcactaact ttacatccag acaagaataa agatgaaaat gcagaaactc 420  
 agtttagaca attggtggcc atttatgaag ttttaaagga tgatgaacga aggcagaggt 480  
 atgatgatat tctgatcaat ggacttccag attggcgaca gcctgtattc tactacaggc 540  
 gggtagaaaa aatgagcaat gctgagctgg cattactctt gttcattatt ctcacagtgg 600  
 gtcattatgc tgtggtttgg tcaatctacc tggaaaaaca actggatgaa ctactaagta 660  
 naaaaaagag agaaaagaaa aaaaagactg gancaagagt gtggatgtat caaaactcgg 720  
 gtgcttcaga aaaaaaatga aaagantgct gattgaaacc acagtgggca atgatttgct 780  
 ttcaatgcaa aactggggga attttgggtt ttgcccttaa aactaaaaag caattacctc 840  
 nacctcaanc caang 855

<210> 2

<211> 685

<212> DNA

<213> Homo sapiens

<400> 2

cacaggcaac ttcctcactt tgacccaagc tattgacaaa ttttcagcag atggaatgcg 60  
 tttggctctg gctgatgctg gtgacactgt agaagatgcc aactttgtgg aagccatggc 120  
 agatgcaggt attctccgtc tgtacacctg ggtagagtgg gtgaaagaaa tggttgccaa 180  
 ctgggacagc ctaagaagtg gtccctgccag cactttcaat gatagagttt ttgccagtga 240  
 attgaatgca ggaattataa aaacagatca aaactatgaa aagatgatgt ttaaagaagc 300  
 tttgaaaaca gggttttttg agtttcaggc cgcaaaagat aagtaccgtg aattggctgt 360  
 ggaagggatg cacagagaac ttgtgttccg gtttatigaa gttcagacac ttctcctcgc 420

tccattctgt ccacatttgt gtgagcacat ctggacactc ctgggaaagc ctgactcaat 480  
 tatgaatgct tcatggncgt tggcagggtcc tgtaaatgaa gttttaatac actcctcaca 540  
 gtatcttatg gaagtaacac atgaccttag actacgactc aagaactata tgatgccagc 600  
 taaagggaag aagactgaca aacanccctt gcanaaagcc ctcacattgc accaacctat 660  
 gtggcaaaga aactatccan cttgg 685

<210> 3

<211> 755

<212> DNA

<213> Homo sapiens

<400> 3

agcactctgc gcgcccgtc ttctgtgtgt gtttgtctac ttctcctgc ttccccgcg 60  
 ccgcccgcgc catcatgagg gaaaacgtgc acttgcaggc cgggcagtgc ggcaacaaaa 120  
 tggcgccaa gttttgggag gtgatcagcg atgagcacgg catcgacccc acgggcacct 180  
 accacgggga cagcgacctg cagctggaac gcatcaacgt gtactacaat gaggccaccg 240  
 gcggcaagta cgtgccccgc gccgtgtctg tggatctgga gcccggcacc atggactccg 300  
 tgcgctcggg gcccttcggg cagatcttcc agctgaccca ctccctgggt ggggggactg 360  
 ggtctgggat gggtaccctc ctcatcagca agatccggga ggagtaccca gacaggatca 420  
 tgaacacgtt tagtgtgtgt ccttcgcca aagtgtcaga cacagtgggt gagccctaca 480  
 acgccaccct ctcatgccac cagctcgtag aaaacacaga cgagacctac tgcattgata 540  
 acgaagctct ctacgacatt tgcttcanaa ccctaaagct gaccacgcc acctatgggt 600  
 acctgaacca cctgggtgtn gctaccatgg gtgggggtcac cacctgcctg cgcttcccag 660  
 gncagctcaa tgctgacctg cggaagctgg gtgtaaacat ggtcccgttt cccgggtnc 720  
 cttcttcatg ccccggcttt ngccccactg aacaa 755

<210> 4

<211> 752

<212> DNA

<213> Homo sapiens

<400> 4

```

tttcccgcca cggcagtgga gccgacagtg actatgagaa cacgcaaagt ggggacccac   60
tgctggggct ggaagggaag aggtttctag agctgggcaa agaggaagac ttccaccag   120
agctggaaag cctggatgga gacctagatc ctgggcttcc cagcacagag gatgtcatct   180
tgaagacaga gcaggtcacc aagaacattc aggaactgtt gcgggcagcc caggagtcca   240
agcatgacag cttcgtgccc tgctcagaga agatccattt ggctgtgacc gagatggcct   300
ccctcttccc aaagaggcca gccctggagc cagtgcggag ctactgcgg ctgctcaacg   360
ccagcgcta ccggctgcag agtgagtgcc ggaagacagt gccccagag cccggcgccc   420
cagtggactt ccagctgctg actcagcagg tgatccagtg cgcctatgac atcgccangg   480
ctgccaagca gctggtcacc atcaccaccc gagagaagaa gcagtgacct ctctccccac   540
accctcacct gcaccctagg acctcactgg ccatangagc tgggccactc cagacattaa   600
tccccacccc aacagagcca ctggcacaag tgcccttagt gctgccacac tccctggcag   660
ccaggtgccc tgggtgccacc cctgtcgagc ccctaaggat ggggaggtgg nggggcagga   720
nctttctgtc ccccaanatt ccaatggcac ct                                     752

```

<210> 5

<211> 766

<212> DNA

<213> Homo sapiens

<400> 5

```

ctatagtcaa gctaataacc catgtagatg tagtggtgta cctgggtgcc gtgtccctgt   60
gaatgtgtca tggtgtgctg gcctgattcc ccaacatcag ccccaggag ccagcagctg   120
gagcagctgt catcttgtga aagcagagtg tccttggtgc tattgattgg gttgttcagt   180
caattgcaaa aaaagtggat ctaactgtca atggtagtta tatgataatc ctggagataa   240
ataagtgtca agtgaagtat tacttgaatt taggacctga agagagagaa aggggtatga   300
gtagttggag gggaagattt gctatgacaa gctattattc agtgtggtta ttttgtatga   360

```

caggtaagtc tacaggtatc ttttgttaga taaaccagaa attaagcatt ccctttgtaa 420  
 actccaaaca agattttgaa acaccatggc ccccccttat ccacctccaa gatctccagt 480  
 ggatgtctga aaccactgat agtactgaag tctctatata ttatgttttt cccctgtatg 540  
 taatacatac ctgtgataaa gtttaattta taaattangc acaggaagaa attaacaaaa 600  
 ataagtaaga atagaacagt tataactata tgttcnatta aaagttangt gaatttgttt 660  
 tctgtctctc tcaaaatata ctgttggtgt gtgtgttcaa ccatttttga gnttccgttg 720  
 acctggtgga taacaaaacc acagaaaagt tgnnacttca cataaa 766

<210> 6

<211> 739

<212> DNA

<213> Homo sapiens

<400> 6

ttgtagaatg taatctctgg taacactgac ttttaaggagc aatgagtgtg tgtgtgtgtg 60  
 tgtatgtgtg tgagtgtata tatattccca taggctagca aatgaaaact gacagtgaac 120  
 ttttcctcta gctctgatag agtgactggc attgggcatt tcctcctggc atagacaact 180  
 ctaaagctgg taaaatgtgc atgacaaatg ttttaaggca ttaaacaaca ggcagcacag 240  
 aactgtaatt ctgagagaa aggaaacatg agaggtgagg ctgagtttg cccagtgtc 300  
 tgcctgggac cgtttcctgc acatctccag cagaactgtg gcctcactga cctgaggagg 360  
 agattggagc tgttgtctca gaagcagctg agatttgggg agccaagtgc aagagcagaa 420  
 gctgaggaca agggtttcca gaagtcttga tgaagactca ttgctggttt ttggctgaag 480  
 gctgccaca ccatggcang cagtacacag ggcctagcag tggttgcctt ctgcagggct 540  
 gggaatgaat gaaggcatta ttgctatgca ccaccaagga gatgctggag ctccagctca 600  
 gccagaatgg agagaactca ntgagcatct caagtcaggc attcagttga aacctcagaa 660  
 agtccacacc atancaagta aaagctatac cctcaaataa ngggccacac cttagcccat 720  
 aactangata agttcaagt 739

<210> 7

<211> 772

<212> DNA

<213> Homo sapiens

<400> 7

```

gttaccatgc taaatgtaat gcgtttatatt attattcagc aaaatctatg gcagaggcat   60
tccaaatagt agctcgtgga gaattaaaag tatcaggac ttgtagaaat cttggtttct  120
ttattttttt aaagcatcag aaggtacttg aaagatgtga acagataaat taaggctaaa  180
aagaaaacag aaatggctac attttaaact gcctttctac cctcagtatt taattagatc  240
aattgtatag aggaatgaac agaggtgaca ttccctcattg ggattccttc caggactctt  300
atagactttg cattcagaat gtcccatatt tcattgtgtt gtactgatga taatttaagt  360
attaggggaa aatccattta taaattaaac aaaatgactt gatatccatc agtcccctag  420
ttcatcaagc tgttcaaaca cggggaagat tggctggtcg gcctgggtct tccgagagcg  480
ctggtaatta gatctgcgaa ggatttatctc ttgctgatt ggggccttaa attaattgaa  540
gttccacatt tgtggnnttg tccttttttg acttttttag aggagatatt tcatattcct  600
gtgtggtgga gtgcttggn cagcagcagt gggttaaatg ttaatttttc tcatgagaag  660
tttaagattt ttgatgaat caagggctga ttgaagtgc aaagtgtan ttgcttacct  720
ggggaaatta ttttttcacn cctcaaaaga tgccttgac ntttaactga tc          772
    
```

<210> 8

<211> 879

<212> DNA

<213> Homo sapiens

<400> 8

```

agggcgggtg gagtcgcgga gtagtcctca tggccgcccc gccggagccc ggtgagcccc   60
aggagaggaa gtcccttaag ctccctaggat ttttagatgt tgaaaatact ccctgcgccc  120
ggcattcaat attgtatggt tcattaggat ctgttggtgc tggctttgga cattttttgt  180
tcactagtag aattagaaga tcatgtgatg ttggagtagg agggtttatc ttggtgactt  240
    
```

tgggatgctg gtttcattgt aggtataatt atgcaaagca aagaatccag gaaagaattg 300  
 ccagagaaga aattaaaaag aagatattat atgaaggtac ccacctcgat cctgaaagaa 360  
 aacacaacgg cagcagcagc aattgaacaa tcttgagcat agaagtcaat gtaaacgaag 420  
 ttaagatcaa ccacataaaa catttcatgt gcaataagct ctcaatcaag taaataaagt 480  
 ttaagttgta gtcatttttt tcccacactt gtgtggaatg aaaacttgcc aatttattct 540  
 ggccctgtgt ctactgccag gatagcattc ttacgtgtta catatagtgg acttgtcatc 600  
 cttaaaatgt gaacagaatt tattggcaag tgtggcaaag aattataaaa catagtgttt 660  
 aatgtacttg gagtttcctt gtagtnngta agtatagagt ttgatgataa gtaaacgtcc 720  
 cttacaacaaa acctcaacct tattactaat ccattataaa aaacagcaaa tacttactga 780  
 gttcctgtaa gaggcctaag tcatggtaga tttaaaccac ggggctttta acactttgca 840  
 aaatttantt ttttaaang cattcaacan ttggcaaag 879

<210> 9

<211> 758

<212> DNA

<213> Homo sapiens

<400> 9

cactgttcta aaaatacata tgattatagc tgccactcca tcaggagcaa attcttctgt 60  
 taaaagctaa ctgatcaacc ttgaccactt ttttgacatg tgagatcaaa gtgtcaagtt 120  
 ggctgagggt ttttggaag ctttagaact aataagctgc tgggtggcagc tttgtaacgt 180  
 atgattatct aagctgattt tgatgctaaa ttatcttagt gatctaagg gtagtttagt 240  
 gaagatggaa tcttgtattt aaaatagcct tttaaaattt gttttgtgat gatgtatttt 300  
 gacaacttcc atcttttaga gttatataat caccttgatt ttagtttcct gatgtttgga 360  
 ctatttataa tcaaggacac caagcaagca taagcatatc tatatttctg actggtgtct 420  
 ctttgagaag gatgggaagt agaaaaaaaa aaaaaagaaa gaaaggaaag gaagagagga 480  
 gagaagaagg cagggatctc cactatgcat gttttcactt tagaactgtt gagcccatgc 540  
 ttaattttta tctagaagtc tttaatggt gagacagtga ctggagcatg ccaatcagag 600  
 agcatttgtc ctcaaaaaa aaaaaaaatc tgagtttgag actancctgg ccaacatgtt 660



gaaacccccca ttcctacaaa aaatacaaaa attancctgg tgggtggtngc gcacgcctgt 720  
agtcaccaagc tactccggga gcctgaggga acgtgaan 758

<210> 10

<211> 713

<212> DNA

<213> Homo sapiens

<400> 10

agtttcaagt ttccatttct gattttctgct ctctgcgctg agcacagcgg caccaggctg 60  
agctaagcag ggccgccttg ggcaggccta cgtggtggtg caggcgagac ccaggctggg 120  
caaggcgagc tttcagtttc catcttgggt ctctgagctg agcagagtgg caccaggctg 180  
agttaagtgg gactgccctg ggcagacctt cctactagag cagaatggag cttcggtcct 240  
accaatggga ggtgatcatg cctgccctgg agggcaagaa tatcatcatc tggctgcca 300  
cggtgcccgg gaagaccggg gcggctgctt atgtggccaa gcggcaccta gagactgtgg 360  
atggagccaa ggtggttgta ttggtcaaca gggtgcacct ggtgaccag catggtgaag 420  
agttcaggcg catgctggat ggacgctgga ccgtgacaac cctgagtggg gacatgggac 480  
cacgtgctgg ctttggccac ctggcccggg gccatgacct gctcatctgc acagcagagc 540  
ttctgcagat ggcaactgacc agccccgagg angangagca cgtggagctc actgtcttct 600  
ccctgatcgt ggtgggatga gtgccaacac acgcacaagg acaccgtcta caacgtcatc 660  
atgaagccag tacctanaac ttaaactcca aagggaana nccgctaacc cca 713

<210> 11

<211> 823

<212> DNA

<213> Homo sapiens

<400> 11

tacgaagcat tccagaagac tcagagttaa atacagttac attgccaaga aaagcaagaa 60

tgaaagacca gtttggcaat tctattatca acacacctct gaaacgtcgt aaagtgtttt 120  
 ctcaagaacc tccagatgct ttagctttta gctgccaaag ttcctttgac agtgtcattt 180  
 taaactgtcg aagtatacga gtaggaacac tcttccggct gttaatagag cctgtaattt 240  
 tttgtttaga ttttatcaag atacagctag acgaaccaga ccatgatcct gtagagatta 300  
 tattaaatac ctctgatcta actaaatgtg aatgggtgtaa tgtccgaaaa ttacctgtag 360  
 tgtttcttca agcaattcca gcagtttatc aaaagctgag catccaactg caaatgaata 420  
 aggaggataa agtttgggaat gattgttaaag gagtaaataa attaacaaat ttagaagaac 480  
 aatatataat ttttaattttt caaaatggcc ttgatcctcc ggcaaataat gtatttgaaa 540  
 gtatcattaa tgaaattgggt ataaagaata acatctccaa tttttttgcg aaaattccct 600  
 ttgaagaagc taatggcaga cttgttgcct gtacaagaac ctatgaagag agcatcaaan 660  
 ggaagtgtg gggcaaaagg gaaacaaaat taaaactgta tcatttgaat ctaaaataca 720  
 acttaagaag caaacaagaa tttcagtttt ttggatgaan gaaagaagga aactgggaga 780  
 aaaccacacc aatcttcaan tgggcccaag tngaaaaagg ttg 823

<210> 12

<211> 603

<212> DNA

<213> Homo sapiens

<400> 12

ggaaggctga ggcaggagaa tcgcttgaac ccgggaggcg gaggttgcag tgagccaagt 60  
 tcgcaccact gcactccagc ctgggcaaca agagcgagac ttcattctca aagaaaaaaaa 120  
 anaaagaaaa agctgcccc a tcgcatcgca tagaggctgc tatgggatta gaacgtagct 180  
 tgagatctgc aggtcaacag gtctgtttgg catctcaggt tttcctcaca taagtgaag 240  
 atgcctggta tggcctagtg ttgttctgcc tccctcctct gcccgccagg tatacatgga 300  
 ctggtacgag aagttccagg acaggctcaa caagaagggt gtactcctga caggcgagac 360  
 cagcacagac ctgaagctgc tgggcaaagg gaacattatc atcagcacc ctganaagtg 420  
 ggacatactt tcccggcgat ggaagcancg caagaacgtg cagaacatca acctcttcgt 480  
 ggtggatgag gtccacctta tcgggggcga taatggggta tggcgttcct tgcagcacag 540

atgagggact gggantgacc aagtggncctt ggcattggnc ctaatgtttg ggtctgagga 600  
cgg 603

<210> 13

<211> 744

<212> DNA

<213> Homo sapiens

<400> 13

aagatggctg ccgctaccgg tgcggtggca gcctcggccg cctcgggtca ggcggaaggt 60  
aaaaagatca ccgatctgcg ggtcatcgat ctgaagtccg agctgaagcg gcggaactta 120  
gacatcaccg gagtcaagac cgtgctcatc tcccgactca agcaggctat tgaagaggaa 180  
ggaggcgatc cagataatat tgaattaact gtttcaactg atactccaaa caagaaacca 240  
actaaaggca aaggtaaaaa acatgaagca gatgagttga gtggagatgc ttctgtggaa 300  
gatgatgctt ttatcaagga ctgtgaattg gagaatcaag aggcacatga gcaagatgga 360  
aatgatgaac taaaggactt tgaagaattt ggtgaaaatg aagaagaaaa tgtgcattcc 420  
aaggagttac tctctgcaga agaaaacaag agagctcatg aattaatana ggcagaagga 480  
atagaagata tagaaaaaga ggacatcgaa agtcaggaaa ttgaagctca agaaggtgaa 540  
gatgatacct ttctaacagc ccaagatggg gaggaagaag aaaatgagaa agatatagca 600  
ggttctgggtg atggtacaca aggaagtatc taaacctctt ccttcanaag ggaacctact 660  
gangctgac acacagctca tgaagagatt ggaaagctca tncgaactgt gaaagaagct 720  
gagggatgac aaaatctccg ggca 744

<210> 14

<211> 782

<212> DNA

<213> Homo sapiens

<400> 14

acccatctac agcaagaaga cggaaatcca aaggcagaca gtacgggctc ccttcgccaa 60  
 actcttcatt ttctctgcac ttcaggtggc aagacagctc cttcttcagc agcaacagca 120  
 gcagcaagtt agtggattaa aatctcccaa gaggaatgac aaacaaccag ctcttcaggt 180  
 tcccgtgtca gtggctatga tgacacctca agttatcact ccccagcaaa tgcagcagat 240  
 cctccagcaa caagtgtga gccctcagca gctccagggt ctcctccagc agcagcaggc 300  
 cctcatgctt caacagcagc agcttcaaga gttttataaa aaacaacagg aacagttgca 360  
 gcttcaactt ttacaacaac aacatgctgg aaaacagcct aaagagcaac agcgggtggc 420  
 taccagcagc ttggcttttc agcagcagct ttacagatg cagcagttac agcaagcagc 480  
 acctcctgtc ttgcaagcg ccaaggcctt gtgacaattc aagcccgggc agcctgccct 540  
 tccccitcaa cctcttgctc aaggcatgat tccaacagaa ctgcagcagc tctggaaaga 600  
 agtgacaagt gtcatactg cagaagaaac cacaggcaac aatcacagca gtttgatct 660  
 gaccacgaca tgtgtctcct cctctgcacc ttccaagact ccttaanaat gaaccacat 720  
 gcctctacaa tgggacagct ctcagtccan actcccaaaa ngggaaagtt tgtcccatga 780  
 gg 782

<210> 15

<211> 589

<212> DNA

<213> Homo sapiens

<400> 15

aggaagtaga acgccggctc gcatgcctgc ccgccgcca gcctgccggg tacggccttt 60  
 tccgccgggg cttccaggtc aaagaattcg cttttgccgc taccgcttcc ttaccctccg 120  
 cacccggttaa gttctccggt cgggcggcag tctctgaaca cttagccgcg ccatccgggg 180  
 tcacaccgcc tggaaggagg tgacgggggc ggcgcggggc gcggacactc cccgctgaga 240  
 gtccgcctgc catggactcg gaatattaca gcggcgacca gtcagatgat ggtggtgcta 300  
 ccccagtaca ggatgaacgg gattcagggt cagacggtga ggatgatgta aatgagcaac 360  
 actccggatc agacactgga agtgtagaac gtcattcaga gaatgaaact agtgactcag 420  
 aaaatgaaga gcttcccaaa ccccgaatca gtgattcgga aagtgaggat cccaaggaa 480

ccaggccagt gattcggaat atgaggagct acccaaacc cgagtcaant gactctgaga 540  
gtgangggcc tcanaagggg cctgccagt actcagaaac tgaggatgc 589

<210> 16

<211> 730

<212> DNA

<213> Homo sapiens

<400> 16

atcgcttctc ggccttttgg ctaatgatca agtgtagtat ctgttcttat cagtttaata 60  
tctgatacgt cctctatccg aggacaatat attaaatgga tttttggaac aaaacaaaac 120  
aaaaacaaaa acaaaaaatc caaacaaaaa caatcctgcc gaagtggggc agaaatgagt 180  
ggaaacttaa caaatgaatg ggaaaaaaa aatcgaagtt cctttatcga aaatataatg 240  
tattttaact aaagtgttaa attttgaaac agtggataaa aacgttttaa gtgaatttta 300  
ttcccatctt tgcggcaaat gcccgaggc ccccaaaaaa gggcatgctc aagtcccca 360  
cagtcgaaat ctgctaatac agaataaaa tggaatcatt aggataaaat tatcgagtgt 420  
gttcaggagc ggctatgcca gtgaatttcc agcctgaaat gaaatcatga cttangtgta 480  
tttatgagta tctgttttaa aaaccactgt gatagctagc tatcacctca aattttgaag 540  
tcgtttcgtt gagtgtgaaa naaaggagaa gacatttcaa agtgcattta gctattttaa 600  
aaccctttat tcaatgantg tgctgctgat tattacatgt ctgtggaagc ttctggagcc 660  
attggtggga gaggcaagat gtgaaanaat cagtcgagat ggtanattga tatgacattt 720  
tgnaccaaca 730

<210> 17

<211> 542

<212> DNA

<213> Homo sapiens

<400> 17

agcctacacc gactctggga ggaagactgg agcctttgcg gcggcgctgc ccctccccctg 60  
 gtccccgcga gctcggaggg cccggctggt gctgcggggg ccccgggagc gtgcttctgt 120  
 tcttcaagat tgaaaactaa gcatggggaa gagctgcaag gtggtcgtgt gtggccaggc 180  
 gtctgtgggc aaaacttcaa tcctggagca gcttctgtat gggaaccatg tagtgggttc 240  
 ggagatgac gagacgcagg aggacatcta cgtgggctcc attgagacag accgggggggt 300  
 gcgagagcag gtgcgtttct atgacacccg ggggctccgg gatggggccg aactgccccg 360  
 acactgcttc tcttgactg atggctacgt cctggtctat agcacagata gcagagagtc 420  
 ttttcaacgt gtggagctgc tcaagaagga gattgacaaa tccaaggaca agaaggangt 480  
 caccatcgtg gtccttggca acaaagtgtg acttacagga gcancggcgt gttagacca 540  
 gn 542

<210> 18

<211> 751

<212> DNA

<213> Homo sapiens

<400> 18

gcttctccgg cggaaccag gctggaccgc gggccccggc ctgggggcca ctgctgccac 60  
 cgccgccgcc acctcgtctc ctccccgtcc ccgccagcc ccaggctctc ccgcctcact 120  
 cgggcccgtg gccggggtca ctccccgccg cccctccccg cacggatgcc gaaggatgaag 180  
 gcgctgcagt gcgccctggc gctggagatc agctcagtaa cttgccagg agtcgtgctt 240  
 aaagacaaag aggacatcta tcttagcatc tgttgttttg gccaatacaa aaagacacaa 300  
 tgtgtcccag ccacttttcc cctggtcttc aatgccagaa tgggtgttga aaagggtgttc 360  
 ccggacgcag tagatcctgg agatgtggtt acacagcttg aatatgatac agcagtgttc 420  
 gaggtagatac agctagtctc accagtgggt gaaacactgt ctacgtatga cgaaaataca 480  
 cgagatttca tgtttccggg tccaaaccaa atgtctggac accatgattc aaaccgccag 540  
 gttacatga ggaggatttc tggccttcga ggaaatgctc caaggctgga attttctacg 600  
 acttcagtga ttactgaatg tctgataagt tcaaggaaat gccacactca ggataaattt 660  
 atttaccant tggctccagt tgaaaaatca catggcaaac tgcaaaaaca gaacatcaag 720

atnacaanag aaaaaaatcc aaagtcacct t

751

<210> 19

<211> 806

<212> DNA

<213> Homo sapiens

<400> 19

```

gtcgtctgcg gcggcggcgg cggtgagga gcccggtga ggcgccagta cccggcccgg 60
tccgcatttc gccttcggc ttcggtttcc ctcggccag cagccccgg ccccgcccca 120
gccctcctga tccctcgcag cccggctccg gccgccgcc tctgcccgcc caatgatgat 180
gatggcgctg agcaagacct tcgggcagaa gcccgtaag ttccagctgg aggacgacgg 240
cgagttctac atgatcggt ccgaggtggg aaactacctc cgtatgttcc gaggttctct 300
gtacaagaga taccctcac tctggaggcg actaagccac tgtggaagag aggaagaaaa 360
tagttgcac gtcacatgat caggataca cgactctagc caccagtgtg accctgttaa 420
aagcctcgga agtggaagag attctggatg gcaacgatga gaagtacaag gctgtgtcca 480
tcagcacaga gccccccacc tacctcaggg aacagaaggc caagaggaac agccagtggg 540
taccaccct gcccaacagc tcccaccact tagatgccgt gccatgctcc acaaccatca 600
acaaggaacc gcatggggcc gaagacaaga agagaaacct tcccccttg ctttgatgac 660
catgaccan ctgtgatcca tgagaacgca tctcaagccc gaggtgctgg tccccatccc 720
ggctgggcat ggagattcga tggggangaa gctgcgaaga cgccttcacc tgggaacatg 780
aatgagaagt tnatgacccc ngagaa 806
    
```

<210> 20

<211> 891

<212> DNA

<213> Homo sapiens

<400> 20

acacttttat attaacaagc attttgaaaa ggctgagggc agatatgtta gaagccatct 60  
 tcttattcct aaattcatgc ttaaagttaa ttgtccttca gttttccac tcctgagttt 120  
 ggagtctgct ggatgatggg tggtttgggg aaggaaaagg gttctgtaca ttggcctggc 180  
 ctgcaatacg gctcgtata tttatatttc ctacctggag aatgcctgga ctgttctccc 240  
 catggaagtt cttcaaggag tgaagagcag caggctcagc tggccgcggg aggacactga 300  
 gggcatcctg ctcatctcac acaggagcta cagtacatat tggcaggaaa aggtaaactt 360  
 tcgtaatctc attggaatta caacaggga atggagttca atgaggactt tcagttcttt 420  
 gcttggttag gttaaggatg atagaatttc tctgccagtg cagtaagagt tgaaaccggc 480  
 agttacacta agtaagtgga gggaaatgaaa gtgtttcgag gtgaatgtgg atataatttc 540  
 cctcttctga ttattttattc ttatttggtt cctaacacaa actgggaaga agatagaatt 600  
 catctatact ttcttttttc ttggagagaa ccgtttaaaa aattacaaga tatattttaa 660  
 aagtaaccaa gataaaagtt agcacatgtg cttttgttaa aaaataaagt taaaagttaa 720  
 agttaaaaaa atggaagtta aaaagtttca tcaggaaact ttacatatcc tttagcaaatt 780  
 atatttttaa aaggtgtang ggcatataat gggaaataat tcctttgagc aaacaanaag 840  
 gctattaatt aaactactng caaagcctaa gcccacaggc ttaaaaaatg g 891

<210> 21

<211> 873

<212> DNA

<213> Homo sapiens

<400> 21

actcgtaact cgcacccggg tcctggctgc accgcatccc ctctgcacc ccctggatgg 60  
 cccttcagcc aacggggggc tgggcgatgg tcgaccacgg agctgcgcaa ggaaaagtcc 120  
 cgggatgcgg cccgcagccg gcgcagccag gagaccgagg tgctgtacca gctggctcac 180  
 acgctgccct tcgcccggg cgtcagcgcc cacctggaca aggcctctat catgcgcctc 240  
 accatcagct acctgcgcat gcaccgcctc tgcgccgcag ctggagctca ttggacacag 300  
 catctttgat ttcattccacc cctgtgacca agaggagctt caggacgccc tgacccccca 360  
 gcagaccctg tccaggagga aggtggaggc cccacaggag cgggtgcttct ccttgcgcat 420



gaagagtacg ctcaccagcc gcgggcgcac cctcaacctc aaggcggcca cctggaaggt 480  
 gctgaactgc tctggacata tgagggccta caagccacct gcgcagactt ctccagctgg 540  
 gagccctgac tcagagcccc cgctgcagtg cctggtgctc atctgcgaag ccatccccc 600  
 cccaggcaag cctggagccc cactggggcc gaggggcctt cctcagccgc cacagcctgg 660  
 gacatgaagt tcactactgt gacgacaggg ttgcaaaaag tggctggcta tagtccgatg 720  
 acctgatcgg ctgttccgcc tacgagtaca tcaacgcgct ggactcccga cgcggtcaag 780  
 caaagaagca tccaaaaccc ttgctggagc aaaggggcca aggcagttaa caaggggcan 840  
 attatgcctt ttccttgggc ccgggaantt ggn 873

<210> 22

<211> 779

<212> DNA

<213> Homo sapiens

<400> 22

atagagaaga acggaggtac ggcctgtggt catggcgctg ttcccagcct ttgcggggct 60  
 tagtgaggct cccgatggcg ggagctccag gaaagagtta gactggctga gcaacccaag 120  
 cttttgtgtt ggatccataa cgctccctgag ccaacaaact gaagcagctc cagcccatgt 180  
 ttctgaaggg ttaccgctga caaggagtca tctgaaatca gagtcttcag atgaaagtga 240  
 cactaacaaa aagctcaaac aaacaagtag aaaaaagaag aaagagaaaa agaaaaaaag 300  
 gaagcatcag catcataaga aaacaaagag gaagcatggg ccgtcgagta gcagcaggtc 360  
 tgagacagac accgattctg gaaaggacaa acctccaga ggcttggag gcagtaaaaa 420  
 ggaatctgag gaaccgaatc aaggaaataa tgctgcagct gatactggac atcgctttgt 480  
 ttggcttgag gacattcagg ctgtgacggg agaaaccttc agaacagata agaaaccaga 540  
 tcctgcgaac tgggagtaca agtctctcta ccgaggggat atagcaagat acaagaggaa 600  
 aggagactcc tgccttggca ttaaccctaa gaagcagtgc atatcttggg aagggacttc 660  
 cacagagaag aagcattcac gcaagcaagt ttgaacgcta ttttactaag aagagtgtgg 720  
 gattaatgaa catcgatgga ntgnncanta acagtaaaac tgaaacctcc ctcactctgg 779

<210> 23

<211> 856

<212> DNA

<213> Homo sapiens

<400> 23

```

gcttcccgga agtggcggcg cggtcagggc tggccttggc ttcagctgcg gttttggggt 60
cccggaactct gggatcggcg gcgctatgag ttctttcgag gggcagatgg ccgagtatcc 120
aactatctcc atagaccgct tcgataggga gaacctgagg gcccgcgcct acttcctgtc 180
ccactgccac aaagatcaca tgaaaggatt aagagcccct accttgaaaa gaaggttgga 240
gtgcagcttg aaggtttatc tatactgttc acctgtgact aaggagtgtg tgttaacgag 300
cccgaaatac agattttgga agaaacgaat tatacttatt gaaatcgaga ctctaccca 360
gatatcttta gtggatgaag catcaggaga ggtttttatt tcagggcaat aatggaactg 420
tcctgtacac aggagacttc agattggcgc aaggagaagc tgctagaatg gagcttctgc 480
actccggggg cagagtcaaa gacatccaaa gtgtatatatt ggatactacg ttctgtgac 540
gaagatttta ccaaattcca agtcgggagg agtggttaag tggagtctta nagctgggtcc 600
gaagctggat cactcggagc ccgtaccatg ttgtgtggct gaactgcaaa gcggcttatg 660
gctatgaata tctgttcacc aaccttaagt gaagaattag gggcaaggt tcaatgttga 720
ataagctaag acatgtttta ggaacaatgc cctgagattc ctcatcaat ctcaaaaca 780
agaccggcaa cactcaagan tccaatgcaa tgcccgggaa tccccaaggg caanaaggaa 840
ataattttca agtgggn 856

```

<210> 24

<211> 740

<212> DNA

<213> Homo sapiens

<400> 24

```

cggcngaaga cggcctatgt gggccttttt tttttttttt ttatattttg agaaacctcc 60

```

atactgtttt ggcatagata gtggctgcac aattttgcat tcccacccag catacaaggg 120  
 ttccaattcc tccatatacct caccaacact cttttgtttt ttgatagta gtcatacataa 180  
 caggtgaggt gatattaagg agtacttctg cactgaggca cttgtctcaa ctatattttt 240  
 gttgtacttt caggagacta atagatctgt ggaaatttat caaatctttg ctcatttttt 300  
 taacttctga gagctcttct ttaatctgag tgttcctttt tatgaaattg ttgatgaaaa 360  
 aagccgaaca agtgtaaaat attttaagag atttattctg agccaaatat gagtgaccac 420  
 agcccatgac acagccctca ggaggctcctc agaacatgtg cccaagggtg ctaagggtaca 480  
 gcttagtttt atatatttta gggaggcata agatatcaaa tacatttaag aaacacattg 540  
 gtctggttta gaaagggtggg acaactcaaa gcaggggctt ccagactata ggtaaattta 600  
 aacattttct ggttgacaat aggatgagtt tatctgaaga cctgggatca acagaaaaga 660  
 aatgttcang ttaagataaa ggattgtgga gaccaagttt cactgtgcaa aggaagctct 720  
 canagagcag acttcanaga 740

<210> 25

<211> 794

<212> DNA

<213> Homo sapiens

<400> 25

accaccccag tgaaaccac agaaccatgt acaccctcta agtcccgaag tgccagctca 60  
 gaggaggcct cagagtcacc tacagcccgg cagatccccc cagaggcacg tcggctcata 120  
 gtgaacaaaa atgctgggtga gaccctcctg cagagggcgg cgcgtcttgg ctataaggat 180  
 gttgttctct actgcctcca gaaagacagt gaagatgtga atcaccgtga caatgctggc 240  
 tacacagccc tgcattgaggc ttgttcccgg ggctggaccg acatcctgaa catcctgctg 300  
 gagcacgggg ccaacgtgaa ctgcagtgcg caggacggca cgaggccagt tcatgatgcg 360  
 gtggtcaatg acaacctgga gaccatctgg ctctgctgt cctatggggc cgatcccaca 420  
 ctggctacct actcgggtca gacagccatg aagctggcca gcagcgacac catgaagcgc 480  
 tttctcagtg atcacctctc ggatcttcag ggccgggcag agggatgatcc cgggtgatcc 540  
 tgggattttt acagcagttc tgtgttggag gaaaaagacg ggtttgctg tgacctccta 600

cataatcctc ctgggagctc agatcaagaa ggagacgata cgatggagga ggatgatttc 660  
 atgtttgaac tctcagacaa gcctcttctc ccttgctaca acctccaagt gtcagttgtc 720  
 ccgcgggncc tgcaactggg ttccctcttt tccgaatgtc ttgaanaagg ctggaaagct 780  
 ttccctcnaa ggg 794

<210> 26

<211> 703

<212> DNA

<213> Homo sapiens

<400> 26

gaatcttagc tgattgcatt atgaactgtc aaactgtgaa gatgacccat atgtaaacag 60  
 ttataacagc tacagattat tgctagtagc attctataca attccatatt aatgttctta 120  
 ggagctaata ttgataaag gggaaagcta gttaaaaact aattaatttg tcaaagttag 180  
 cattcttatt atgagtgtaa tatctcatgg agattttaaat atgaacgaaa ggacttatcc 240  
 ttctgctttt taaaagcccc agcattacta gatagtgttt ttcttgaagg ccaaagctgt 300  
 aaaatgacaa agttggtgat tticagcagc actcacctga gctgtgagcg cctgcacctg 360  
 ttcggtagaa cccactagaa tcaattctct gtaggataag tgatgccttt gaatccagca 420  
 gcataaaaat ctgttctttt tagtcatcaa gtttttgttt ccaggatatt tctagcattg 480  
 caaaaaaaaa tttcttcacc aaacactaat tcctaaacac ccatccaaac cacaaaaatt 540  
 ctcttgttag tangcgagag tgctaggact tcctgtgttc aactcccatg caccagcan 600  
 tgtcttttat gcatgagata ttccattaga ttttctaaa agtggcaagg acacccttca 660  
 tagtangtta tatcccttaa ctgggattcc aanagtttaa ncc 703

<210> 27

<211> 685

<212> DNA

<213> Homo sapiens

<400> 27

```

accctgtact tactcactat cataatttat gagaatgaca aatttttaga aataagcaaa 60
ttgacatctc taactctgac ttctctgtct aaactactgt tgcttgaatt tcccaaaata 120
tctgaactcc atatatctga acctaacca taacctctct ttggcaagcc tgttgctgct 180
ttcctatttt tactattcta tctcagggcc ttattcaaag ctcaagcctg gattatcagg 240
acagttttgc taattcactg ctctactttg tctctccttc gaaaccattt ttaccacta 300
ccatgaaaat ggctctctag aatctttatc ggacaaaggt aaaatttctc aattcattat 360
taccaacctt ctaaaatcca gcttcaatct gcctttcttc agactaacat ctattatcc 420
cccacaaata ctggctctac taatgttctt tgaagagctt gttttccage ttccataact 480
ttgctctaaa tgcccacct ccttggaat actttccctc ctccacctat cctccacca 540
gctttcangg ttggggtcag attccatgag gcacttactg atctcttgn cncaaggga 600
ttgttggcct cctctgtccc actcatctgg cattaatcct aaggctgcct tatactctt 660
aaagggtatc cancttaaca catat 685

```

<210> 28

<211> 724

<212> DNA

<213> Homo sapiens

<400> 28

```

gtcactgact aatccataat actaattcag cttctttgtc cgagtgggag ccagaatttt 60
aaaattgtta caggctaaaa tggttagagtc cacctgagct ggatgtgaag gggacaggga 120
gaaggagcaa gaagggaagt catccttccc cacagggtc catgtgcctc tgggtgcaac 180
tttgaacttt gaacctgaaa cttgcactgc tcccctccac tcccctctcc actttcccc 240
tcctgtctcag gccctgtgta tgtggactgc agctgggggt aaggacaga ggctgggtact 300
ggggcaccag aggtcaaggg ggaagtgggg tgttgagcaa gagagagctg ttcttgtttg 360
gtactgagca aagcctacat ccacaagcag tttctgtct ttccagattc ttgaactctt 420
ctgtgggcaa ggagttcatg aactctttag aactggaagc aaccttagag cttttctagc 480
tccatgtttg taaacttttg taagctatgg aacacttact tcaaattgat gcaggatttt 540

```

tgctccttag ttcagctaaa tccaggttct tgtctcacia ccaggaaaaa ttagacatgc 600  
 ggacacattg aagggtgagg caaggcaaga atttagttaa gcganaggga aaactctcgg 660  
 naaaagagaa ggggtttcct ccaaagcagg gtttcccctc ctcaanaagt tttgaaatta 720  
 ccca 724

<210> 29

<211> 718

<212> DNA

<213> Homo sapiens

<400> 29

gttgaaaaca gtttttgaat agaacctgtt gagtccacca atataataaa atcagctggt 60  
 tgtttttgaa ataaatacat atttatttca atataataaa atcagctggt tgtttttgaa 120  
 ataaatacat atttcaaaaa gtataaaatt ttagttgttt cagcgcttct ttttactctt 180  
 gtgtcccagt ttgcatgata aattatatag tattcacact ttaaagacat ttctcataag 240  
 ttatatgaga tttttctgct tacatcctgt tgaccagaat ttaattatat agccatacct 300  
 agctgtaagg gaagctagaa aatgtaattc ttattgtagg tcatcatgga tccagccaaa 360  
 aatctggaag atacagataa aagatactag gagacaagta acattctgcc ctaccttctc 420  
 atcatgtgtt tgcatttttg gctagcacat atactcatga ggtagacctg cggaatttaa 480  
 gggagaaaagt agtatggtag ctttaatatc taatttatat tcatattttt ttaaaagcta 540  
 aagtaaaaaa tgaattgata ctattaagca gatattagag aatcttgggt caggcatggt 600  
 ggctcatgcc tatcatccca gtactttggg agatggagggt gggaggatag cttgagccca 660  
 ngagttggga gaccagcctg gggcaacata gcaagaccct ggtctctaca ggaanana 718

<210> 30

<211> 906

<212> DNA

<213> Homo sapiens

<400> 30

agaactcccc	tgtttcccga	gtgcatagga	aagtgccttag	cattgaatgt	ggagcgatag	60
aatgaacaaa	gaaatgacaa	aatgactagg	tggatgaatg	catagcttaa	tatcagcgag	120
gcaggaagta	aacaaagaga	cactgagcac	caagtaattc	aatacaattc	atcatgagaa	180
cttatcttta	agctcctgtt	tcatgaggtt	agatactgtc	caacatgggt	cttacagcac	240
ttgttttagc	tgacagcact	ggcattcagt	gaaaattaca	gtgggcttga	gtatctttgg	300
aaataacggt	tttgcaaatt	tgattaccat	taaacagcct	ttataaaaca	cctacctgag	360
taggaatgga	gtatatatgt	tagccaagac	ttaattattc	atctcaggaa	ttggcacact	420
atctgttggc	taaagccatc	ttcctgtcta	cttaccttat	ctgtttttat	agagcccata	480
ttctaaaaat	gatttttaca	tttttatatg	tttggggaaa	aaaattcaaa	agaatgatac	540
atgataatta	catgaatttt	gaattttttt	gcccaccaac	gaagttttat	tgggacacag	600
cccgggaaac	aacaacaaca	aaaatgatac	tgaaaataat	aaatctattt	atggacaaaa	660
gaataggagt	caaaaatang	gaggcaagag	agcacactgg	gaatttaggg	aaaaagaaag	720
aaaggnaatt	tttgngcaa	gaatcatcat	taatgggtgt	gatttgaggg	gatacatggg	780
taatgaacat	ttgctaantt	tttaaattac	acaaaatcca	tataaatatn	ttactttgat	840
aaatataaat	atattaatat	ngttaaaaaat	taaacacttc	caataacaaa	tcccttgaca	900
cngggt						906

<210> 31

<211> 698

<212> DNA

<213> Homo sapiens

<400> 31

gaggcccagc	ccgcgcggcg	acgtctccgc	gtggcgtcac	ggcaccgact	gacggccacc	60
caccatggcc	gcagaccagc	gcccgaaggc	cgacacgctg	gccctgaggc	aacggctcat	120
caggtacccg	ggcggggggc	gggcggcggg	gggcgcgggg	ctgcgcggag	gggcacgcgc	180
acgcacgacg	cacgcacgca	cgactacgc	acgcgcctcc	ggctaggaag	ccgctgctac	240
ccatcccgtc	cggccgctgc	cccggccccg	ctggagcttc	tagggcccga	ggcgggcggc	300

gccgttgggc agtcccggcg ggtggtctcc ggggccgcct ccccgacagc gccgtctcca 360  
 ggccgcccag ttcaggagac ggccccgccc tcaccgctgt tcggctgtgt cagcctcgct 420  
 tggcagcctt tactccggag aagaccttca ccctggcgcc tgagaggacc tcaccaggg 480  
 tggcccgtca gcagcacctg ggcctggctc gagagtgacc tgggaggggg ctgaaagggc 540  
 agacaaggga gagtcggggg agtcggttca caggcagcac acttgacctg tgagggggcc 600  
 ctcggtggga cgggtgggtga ggtcgcctcc cactggaact taagggttg gcaccagcg 660  
 aaggggcaan aaggaccaac gttggcttgg naaangga 698

<210> 32

<211> 827

<212> DNA

<213> Homo sapiens

<400> 32

gactttggac tcacgtaggc ataggagaac gaaacttctg tacatttta tctgaataat 60  
 tcttcaggat ttaaaattaa ttggctctgg cttggttga cgtactcgg atctcgccac 120  
 ctctgcgttt cccgagtcac tggcgaagag gtcccagttc ctctgggaat cgtcctgtat 180  
 gcaacatctt cacaagagtgc gcaggcagtt gaatctctgg ccttcgtggg accactggac 240  
 atctggcaga gaaccaggaa accacggttc ctttctgtga gtccctcagc cgaaaaacta 300  
 caagctcctc atgcagctgc tgtctacaga cccctggac tgcctgggga agtgagtcgg 360  
 agctcctgca gcagaggggt ggaacagcta cacgaagatc cgaagggtggc caaaaataac 420  
 agcgctttcc agatgaggga gccagttgtc cagcacagtgc tcatgggaca gtgggccctg 480  
 gtgccacaat gcccggcatc tccaccagat acagctttga gatcttcag atgaagcttg 540  
 ctccaatcca agggctgtca ngtgggggtt gcggttcagc tgctaacctt tctttgatca 600  
 aaatcctgtc ttactggct tcaagaatct gtcttcactg gcttcaaac tgggatgaag 660  
 gaggtcctt antggagagc aaagcaaaga gaaactcaaa ttgntcata ttaaagaaga 720  
 gaaaggatgg atttgtttag acaacacaaa cctaggaagg gtttganaag tganacaagc 780  
 tggggttatg gatgaacggg ggcaattgga atgtngaaat tgaagca 827



<210> 33

<211> 849

<212> DNA

<213> Homo sapiens

<400> 33

```

ctgagagaca ctgcgagcgg cgagcgcggt ggggccgcat ctgcatcagc cgccgcagcc 60
gctgcggggc cgcgaaacaaa gaggaggagc cgaggcgcca gagcaaagtc tgaaatggat 120
gttacatgag tcattttaag ggatgcacac aactatgaac atttctgaag attttttctc 180
agtaaagtag ataaagatgg atgaatcagc cttgttggat cttttggagt gtccggtgtg 240
tctagagcgc cttgatgctt ctgcgaaggt cttgccttgc cagcatacgt ttgcaagcg 300
atgtttgctg gggatcgtag gttctcgaaa tgaactcaga tgtcccagat gcaggactct 360
tgttggctcg ggtgtcgagg agcttcccag taacatcttg ctggtcagac ttctggatgg 420
catcaaacag aggccttga aacctggtcc tgggtggggga agtgggacca actgcacaaa 480
tgcattaagg tctcagagca gcaactgtggc taattgtagc tcaaaagatc tgcagagctc 540
ccagggcgga cagcagcctc ggggtgcaatc ctggagcccc ccagtgaggg gtataacctca 600
gttaccatgt gccaaagcgt tatacaacta tgaaggaaaa gagcctggag accttaaatt 660
cagcaaaggg cgacatcatc atttttgcna aagacaagtg ggattgaaaa ttggtancaa 720
tggggggaaat caaatgggat ccaatggctt tttccccaac aaacttttgt gcaagattta 780
ttaaaccg tttacctcaa gcccccaacc tcaagtggca aaangcnact ttaaggaac 840
ttttgaaan 849

```

<210> 34

<211> 245

<212> DNA

<213> Homo sapiens

<400> 34

```

tactaaatga tgtttatctc actatatccc atgtgctctg actctgagac ttcaaggttt 60

```

gaagggggct aaacatgaaa tacaagttcc cctggaattc agactgggtg aatccaagca 120  
gtttcactgg ccaagaaaac tttatgtttt ggccgggcac agtggttcac gcctgttaat 180  
gccagcactt tggaaggctg aggcgggcgg atcccctgag gtaaggagtt ggggacatcc 240  
nngnc 245

<210> 35

<211> 820

<212> DNA

<213> Homo sapiens

<400> 35

aatcagctat ttcatgcagt gcaaagattg caaagagtac aaaaccagct gaaaagcatg 60  
cgccaagctg cagcagatgc aaagcctgaa agtttaatga agaggctaga ggaggagata 120  
aaatttaatt tatatatggt aactgaaaaa tttcctaaag aattagaaaa taagaaaaag 180  
gaattacatt ttttacaaaa agtagtttca gagccagcta tgggccattc tgatcttctt 240  
gaacttgaat ctaaaataaa tgaaataaac acagaaatta accagttgat tgaaaagaaa 300  
atgatgagaa atgagcccat tgaaggcaaa ctctcactgt ataggcaaca ggcatctatc 360  
atttcccgtg aaaaagaagc caaagctgag gaacttcagg aggccaagga gaagttagcc 420  
agcctagaga gagaagcatc agtaaagaga aatcagaccc gtgaatttga tggtagtgaa 480  
gttttaaagg gagatgagtt caaacgatat gtcaataaac ttcgaagcaa gagtacagtt 540  
ttcaaaaaga agcatcagat aatagctgaa cttaaagctg aattcgggtct tttgcagagg 600  
actgaagaac ttcttaagca acgtcatgaa aatattcaac aacaactgca aactatggag 660  
gagaaaaagg gtatatcttg atatagttac acccaagaag agctagaaag agtatctgca 720  
ctgaagagtg aaagttgatg aaatgaaagg gacgaacatt gggtagatatg tccgaaaatg 780  
gggaaaaaaa actgtattca atgnaanct naaaaaggaa 820

<210> 36

<211> 884

<212> DNA

<213> Homo sapiens

<400> 36

```

gttgacccgc ggcgttcacg ggaactgttc gctttagtgc cggcgccatg gggtcggagc 60
tgatcgggcg cctagccccg cgcctgggcc tcgccgagcc cgacatgctg aggaaagcag 120
aggagtactt gcgcctgtcc cgggtgaagt gtgtcggcct ctccgcacgc accacggaga 180
ccagcagtgc agtcatgtgc ctggaccttg cagcttcctg gatgaagtgc cccttggaca 240
gggcttattt aattaaactt tctggtttga acaaggagac gtatcagagc tgtcttaaatt 300
cttttgagtg tttactgggc ctgaattcaa atattggaat aagagacctt gctgtacagt 360
ttagctgtat agaagcagtg aacatggctt caaagatact aaaaagctat gagtccagtc 420
ttccccagac acagcaagtg gatcttgact tatccaggcc acttttcact tctgctgcac 480
tgctttcagc atgcaagtag gtatttcatt aaacattcag aaaagttacc aatttacaag 540
tgggtttttc atccccaagg aatacttcta acttagttga tatcaattca gagcatattt 600
tcccctagaa ataattattg gaatatggc caagtgacta tattccaag tttatcccat 660
aatgtancta acaacttga actagtgttg ccaagaattc cactagcaaa tagcagctgt 720
atatatatgc tgggaantct gatttcantc tgccttttgt aagagatgat atctgtcatt 780
aaaaacagtc ctcaaatga gaattttccg gtcaaaatt ttttaaaaaa ggtactgggt 840
tggggccaan gcngtgggtg ggtncgcc tggtaatccc caaa 884

```

<210> 37

<211> 917

<212> DNA

<213> Homo sapiens

<400> 37

```

aataicagaa gagagcaatc aaggtagctt attaactgtg ccaggagata ctagtccttc 60
tcccaaacct gaggtattct caaatgtgcc tgaaagagac ctttcaaag tatctaact 120
acattccagt ttgcaactt ctccaactgg agcttcaaac agcaagtatg tttcagctga 180
tagaaatctc atcaagaata ctgccccagt gaacactgta atggacagtc cagtgcattt 240

```

agagccatct agtcagggtg gtgtgatcca gaataaatca tgggagatgc ctgttgatag 300  
 actagagaca ttaagcacca gagactttat ctgcccacaaat tctaacatac ctgatcaaga 360  
 atcctctctt cagagttttt gtaattctga aaataaggta ttgaaagaaa atgctgattt 420  
 tttatccctg cgccagactg aactgccagg aaactcttgt gctcaggatc cggcatcctt 480  
 tatgcctcca cagcagcctt gctctttccc cagccaatca ctttcagatg ctgaatcgat 540  
 ttctaaacat atgtctttgt catatgttgc taatcaagag ccagggtattt tacaacaaaa 600  
 aaatgcagtt cagattatta gttctgcttt agatactgat aatgaatcta caanaagata 660  
 caagaaaaat acttttgtcc taagagatgt tcaaaaaaca gatgcctttg tcccagtgt 720  
 ctctgacaa gcactattca agaagcatca caaaaacttt gagatanctt atactttacc 780  
 tgtgttacca tcangaaaaan ggactttaat gggaagtgat gcctccaacc aagctaaatt 840  
 cacattatgc atttaacaaa ctaacttaaa gtcctccagt ggnatgaag ttgggatanc 900  
 acaactggta cccaagg 917

<210> 38

<211> 743

<212> DNA

<213> Homo sapiens

<400> 38

tctattattg atttcttatt taatttttgt atagccagag aacaccattt atgtggatga 60  
 tctcggctca ccacaacctc tgcctcctgg gttcaagcag ttctcctgcc tcagcctccc 120  
 gagtagctgg gattacaggc atgtgccacc atgcacggct agttttgtat ttttagtgga 180  
 gatgggggtt caccatgttg gtcaggctgg tcttgaactc ccgacctgag gtgatccact 240  
 gcctcagcct cctaaagtgc tgggattaca agtgtgagcc accacgcccg gccttgtgtg 300  
 gttttaattt attaaaaatt gttaaagttt actttatgac ccagaatatg atctatctgg 360  
 gtatatgttc tgtgggcact tggaaagaat atgtattctg ttgctcttga gtagagtgtt 420  
 ttataaatgt ccgttatatt aaaccagttg ataatgttat ccaggtttta tatatccttt 480  
 ttgatttcca tctatttggt tatcagttat tgagaacaga gttattgaag tctcccagtt 540  
 atgactgtgg atttttccat gtctctttta gttctatcaa tttttgcttc atttattttg 600

ggatctttgt tagttgcata ctanatttca gtgtttatct tcttggtgaa ttgacccttt 660  
tatcantatg taacttcctt aaatttagat cttaaantta aaatagattt ccttaaaacc 720  
atangacatt tgagaaggta aac 743

<210> 39

<211> 707

<212> DNA

<213> Homo sapiens

<400> 39

cccaacatct gtgctgatcc tgctaggtaa tgacgccctt tccttatcgt tctagagtca 60  
agcctagatc ccctacaaat acccatgcac acttagagct cactctgggt aaatgttcca 120  
agaaggatgt tggatgggtca ctgggtatca tcccatggag ttcaggatac ccccgccctc 180  
tgagcagcca ttcctctcct gagcacattc ccctagagaa gctctgcacg tgtgcacagg 240  
caccagctgc aggagtgcc aaccacagcac agctgtttat gaaaaaccgt aatcaacca 300  
aacatctgta tgaagaaaaa cgaagaaatg cagagtggca tgttcacatg atggaatact 360  
atgcagctga gaacatgaac aattggagcc atggcatgaa tgaagctgag agatttgaag 420  
cgtcaaccaa gtaagctgta ggagattaca tgtggtggaa gactagttaa taaatctcac 480  
agacaagcct taaagaaaat gtatctcttg aaataaatgt atacacacaa ttatacacat 540  
atatatgata aaccctttta aaaggcaagg gaatgatcaa taaaacata aactgttccc 600  
tctggggcaa aggcggangg caaggcatca agatnaacaa ggaagttagt ctgggttttg 660  
aatttggggt tgtgtgtgca ctgggagtca aacanttatt tttacag 707

<210> 40

<211> 752

<212> DNA

<213> Homo sapiens

<400> 40

agtgcgcgtg cgcgtgccct cctggggcgt gctcgcggct ataaggggcg gaggctgggc 60  
 ggCgttgctc tgcgctctgc ggctgacggc gcttttgtct ccggtgagtt ttgtggcggg 120  
 aagcttctgc gctgggtgctt agtaaccgac tttcctccgg actcctgcac gacctgctcc 180  
 tacagccggc gatccactcc cggctgttcc cccggagggtg agcggccctg tgggcttccc 240  
 cggctcccca ccccatcgc tagagtgtc gccgcgctag cagcctcgcg ttccagggt 300  
 gggggtgcgc cgccgggata ctctctgata gccacgccc catctggggg cccattcag 360  
 ccgtcagccc tgttttgtcc taagggtgtc ctaactagga tccacgtggc ccatcccacg 420  
 cccacagggt ctgagttagg caccctgcc atgccctccc agagcacctt cacgatctcc 480  
 ttgtgtccc aacacttagc gtgttgctg ttaactaccc tttgtctata aggtttgcaa 540  
 tgtggcccta gtatcttcca gggtagctaa cacattgcag atattcatgg tatgtttgtt 600  
 aaataaatga acttgataga ttgaccctc aaanagttat ttggacttgc aaaaagtgtg 660  
 tagttaactc caatctgtga tgtgggaaaa gacttctagg cangttcctt tctcaagggg 720  
 natgttctta tattttccaa taaccaacaa nc 752

<210> 41

<211> 545

<212> DNA

<213> Homo sapiens

<400> 41

ctcgaccctg gacgtctacc ttccggaggc ccacatcttg cccactccgc gcgcggggct 60  
 agcgcggggt tcagcgacgg gagccctcaa gggacatggc aactacagcg gcgccggcgg 120  
 gcggcgcccc aaatggagct ggcccgaat ggggagggtt cgaagaaaac atccagggcg 180  
 gaggctcagc tgtgattgac atggagaaca tggatgatac ctcaggctct agcttcgagg 240  
 atatgggtga gctgcatcag cgcctgcgcg aggaagaagt agacgtgat gcagctgatg 300  
 cagctgctgc tgaagaggag gatggagagt tcctgggcat gaanggcttt aaggacagc 360  
 tgagccggca ggtggcanat cagatgtggc aggctgggaa aagacaagcc tccagggcct 420  
 tcagcttgta cgccaacatc gacatcctca gaccctactt tgatgtggag cctgctcagg 480  
 tgcnaagcag gctcctggag tccatgatcc ctatcangat ggtcaacttc cccanaaaa 540

ttgca

545

<210> 42

<211> 791

<212> DNA

<213> Homo sapiens

<400> 42

```
tacaactgct atataaaata tttaacctgaa acaaaagttt cagaaaacgt ctttaaatagg 60
tgtagtgtag tctttttatt ctattaatta aaaagttggg tacaattgct aaaggatttc 120
atgacttagt ttgaataaaa ctaagtaggc caggcgcagt ggctcacgcc tgttatccca 180
gcactttggg aggccgaggc aggcagatca caaggtcaag agatcgagac catcctggcc 240
aacatgggga aactccgtct ctactaaaaa taaaaagtt agccgagcgt gatggtatgc 300
acctgtaatc ccagctactc gggaggctga ggcaggagaa tcgcttgaac ctgggcggca 360
gaggttgcag tgagtcaaga tcacgccact gcactacagc ctggacgaca gagcaagact 420
ctgtctcaaa aagaaaanaa aataaagtaa ttcagcccta tctctcccag cagaggtaga 480
aacagagggc ctgaggcttg catggcttaa cccgaaaaaa tcagcgccctg gaatagaagc 540
tagatTTTTT cctaactctg tctctaccac cttgcatctg ttactgtatg aattcctctg 600
gaagtgcttc tgtaagaca gacatgttca agtangtgtt cagtacttat tgggtatcat 660
aaatatgttt acattgagaa aaaatggcta tgaagggaga gttgagatga cagaaatgta 720
catagtcaaa atcagnctct ggggtgctggg ttgaaatatg antgaggana gttggggcat 780
ctgggttagc a 791
```

<210> 43

<211> 683

<212> DNA

<213> Homo sapiens

<400> 43

aataaataat aatcttgtag tctcaaaact ctcagatctg ctgctttaat ctacctttca 60  
 tatttgtgcc agaattttct tttgtttttc aataacctat tttaaaccac agttttctca 120  
 ctaaaacttt catctttttt ttatttttct ctttatcaaa atacaacttg actctgaagg 180  
 ccttttataa agtagctcag tgttttctaa attgtgtttt agaatgctgg ttccaaaaaa 240  
 tattaatagg gatttcctgg gggaaagagg cacaaccaa ctccaggata tgctgggtta 300  
 tgcagtttgg aacttctctg gtacttcaag gtgctaataa gggctgaatc taaatgtggc 360  
 tagtggtttg tcctctcatt tcacaaaact cccttttagtg gaacatctca ccttggttaac 420  
 tttgtgtacc aggatcactg ctttgacaaa ctccagggga cgctgttcac atacaacaca 480  
 gaatgaattg tgtttcctgg agttgagagc tgtgttgcat actgtagtat tgctgactgt 540  
 ccactgtgtg acggtcttag agtctgggtg tccctcatcc tttgtttgtg aatgtgtang 600  
 tgtttttcct ctcacctgat angaccctta ngggccagat gctgtgcttg atgcctataa 660  
 gtcctagcac tttgggaggc tga 683

<210> 44

<211> 761

<212> DNA

<213> Homo sapiens

<400> 44

aaagacaatc gcggccaccg ccagggtgaa cggcagggtg gttcaggtag cagcctggcc 60  
 gggacccggc tgtgggacca acgcttccgt tccccattcc cctaccgagc tgggcagtta 120  
 gccagccac tccaactctc ggaacctatg ttgcagactt ggattatgac atcgaagagg 180  
 ataaactcgg aatcccgaact gtgcctggga aggtgaccct gcagaaggat gctcagaacc 240  
 tgatcgggat cagcatttga ggagggggccc agtactgtcc ctgcctctat atcgctccagg 300  
 tatttgaaa caccacagca gccttggacg gcacagtggc agctggcgat gagatcaccg 360  
 gtgtcaatgg cagggtcaatc aaagggaataa ctaagggtga ggtggcgaan atgattcagg 420  
 aggtgaaggg ggaggtgacc atccactaca acaagctgca ggcggacccc angcagggca 480  
 tgtccctgga cattgtgttg aagaaagtca agcaccggct ggtggagaac atgagttcag 540  
 ggaccgcaga tgctctgggc ctgagccggg ccatacctgtg caatgatggg cttgtcaaga 600



ggctanagga gctgggagcg gaccgctgag ctatacaaag ggattacggg acacaccaag 660  
 aacctcctac gggncnttta tgagctgtcg cagactcacc gggccttttg gggacgtgtt 720  
 ctcccctgat cggggtgtcg ggaagcccca ancaatcttt c 761

<210> 45

<211> 757

<212> DNA

<213> Homo sapiens

<400> 45

ccttattttt ttaatgcagt aatagatatt tgaataatag ctttactgag atataattca 60  
 cataccatgc aattcaccca tttcagtggt ttgtaggata ctcagacttg tacgaccatc 120  
 actacaccag ttttagaggc tttaatcacc ccaaaataaa ccctgaaccc cttagtcatt 180  
 gtctctaaat tccccaccc ctcacccctt ggaaatcact aatgtccatt gtgtctctat 240  
 ggatttgcct atcctgaata ttcatatac ggtaaacgga atcaggtaat atgtgatctt 300  
 ttatcactgg catctttcac tgagaataat gttttcaagg ctcacacacg atgttgaatg 360  
 catcagaact ttgtttcttt ttatgggtga ataatttcc attgtatgca tagaccacac 420  
 tctgtttctc cattcattaa tggatgcatg ctaggattac cttcacttgc tagctcttan 480  
 gaatagtgtc gctgtgaaca ttigtgcatg ggtttttgtg tggacttacg ttccatttat 540  
 cttgggcaca tacctagagc nggnttgctg agtaactcag tgtttaacat ttttgaggaa 600  
 cagccaagac tgttttccaa agcaagctgt ancatttcac attcccacca gcagcatatg 660  
 agggntcttg atttccccac gnttagittag tgtaagtga tacctcactg tgggtttggc 720  
 ttccattttt ctgatggggn aatgagggtt gagcaac 757

<210> 46

<211> 747

<212> DNA

<213> Homo sapiens

<400> 46

tatctgatga ccatgtccctc atcctgccta ttggacacta ccagtcagtg gtggagcttt	60
cagcagaggt ggtagaagag gtggagaagt ataaggccac tctgagacgg ttctttaaga	120
gtcgagggaa atggtgtgtt gtatttgaga gaaattataa gagccatcac ctccagctac	180
aggtcattcc tgtcccaatc agctgctcta ctactgatga cattaaagat gccttcatta	240
cccaggcaca ggagcagcag atagagctgt tggaaatccc agagcactct gacatcaagc	300
agattgcaca gccaggagca gcatatTTTT atgttgaact tgacacagga gaaaagcttt	360
tccacagaat taaaaagaat tttcctttgc agtttggag ggaggtcctg gccagtgaag	420
ccatccttaa tgttcctgat aagtctgact ggaggcagtg tcagatcagc aaggaagacg	480
aggagaccct ggctcgccgc ttcgggaaag actttgagcc ctatgacttt actctgggat	540
gactaaaaca aagggaagaa ctttttatga actccacagg aagtagtaaa gctttttttt	600
ttttttaatt aaaagaattt tttttgagac gggagtctcg ctctgtcacc caagcangat	660
tgcantggca taactgtggc tcaactgtanc ctcaacctcc tgggctccgg gagttcctcc	720
caactcagcc tcaatgaatg gctggga	747

<210> 47

<211> 721

<212> DNA

<213> Homo sapiens

<400> 47

aaaaaaaaaa aaagattgtc aaccgggaga aagaaatcct gtcaaattag ttccaggaag	60
ggtttgctca ggattggtgg tatgagaatt taactttaga aacggttctt gtgactgtga	120
agtccttgct attggatctc ttctaaatgt actgttggca caaagcaaga tggcctcatg	180
aagattcaca tcatgactta tagcctggct gaagtttacg tgataatgtg ctgaagaatt	240
catgccatca ctgatactgc ctggaagagg agtatctccc aatgagaagc cctccgtgaa	300
ttttcaggct gtgatgaaag caactggaat aagtcttcca gagagaaata agtatctgtc	360
ccattcagat gtctctcatt tctagattca gtggtctttt ctgcctccca atcaggttcc	420
tctgctatTT tgttttcac atcattattc tgctgaagtg agttctcctt ctgggctgac	480

accctttctt cattttcctc acgctgggaa ctatgatcca cagcttcgtg cttttctctt 540  
 agtacctcgt tctccccgt cgcacatccg ccagcgtccg gcacctgagc cgtcggttcc 600  
 gcgggtgcct tctcctcttc cccgggggtnc aaggggccac tccgagccgc tcgggagtcc 660  
 ccgcagcccc cctgcanagc ctgggctggc cgccgtccac nctgggcgcc gggctccctc 720  
 c 721

<210> 48

<211> 705

<212> DNA

<213> Homo sapiens

<400> 48

gaaaagagat gcaccatttt cttcttggtc ttgggataag ctaagctcat tcccatcttg 60  
 gagctgttgc actggccctt gtgtggctgg tccctcctca tcaccagggt cccagctcca 120  
 atgtcatctt ctctgagaag ccgtccctga ccaggcttag ttgcttccca cccagcctg 180  
 acacactcca gccatcacc cagtcagtgt tatttgcttc atttttacat tatgggtctaa 240  
 aattaacttg ctagtttact gggtttactag tttattatct gtctccttcc attateccctc 300  
 tccttcctc ctteccctcc ccttccttcc ttccttcctt ccttccttcc ttccttcctt 360  
 cgagacacag tcgtactctg tcaccccggc tggagtgcag tgggtgtgat ttgcctcact 420  
 acaaccctg cctcctgggt tttagcgatt cttctgcctc agcctcccga gtagctggga 480  
 ctacaggcac ccaccacgat gccaggctaa tttttgtatt ttatttgag acagggtttc 540  
 accatgttgg ccaagctggg ctggaactct tgacttcaag tgatccacct gtctcgccct 600  
 cccaaagtgc tgggattaca ggcattganc actgcacctg ggccctttta ttattcanag 660  
 taaggacaca caggggacca acaattgggt nccttccaac tccag 705

<210> 49

<211> 548

<212> DNA

<213> Homo sapiens

<400> 49

```
gtgataggat gttaaccacc atgataaaaa cttacaaaag aataaaaatc actaggaaat 60
cagatgagaa cgagaaagaa ataaaatctt atcattacaa aaaccaccaa actgcaaaga 120
tagacactaa gagaggaaga aaggaaaaaa ggatatacaa aatgacaaca aaataaaaaat 180
catatcaagt atcttctcag accacagtga aactagaaat taataccaag aataactttg 240
gaaactatac aaactcctgg acacatataa cttaccaaga ctgaaccaag aagaaatata 300
aaacatgaac ggaccattaa tgagtaacga gattgaatga gtaataaaaa gtccccaac 360
aaagaaaaga ccaggactgc atggcttcac agctgaattc taccaatctt taaaagaaa 420
aaatactaac tcttctcaaa ctattccaga aacttgaagg cgggggtgt gggagtggaa 480
tttgtccaaa ctcatctat gaggccagaa ttaccctgac accaaancca gacaagnca 540
caactaan 548
```

<210> 50

<211> 680

<212> DNA

<213> Homo sapiens

<400> 50

```
ggacatttta tccttaaaaa aaagaaaaaa aaagaaaata ttttaatttt aaataccaat 60
ttttagagta agaaattggg ttgatagtta tctctaatag tgtcaaatga gtatTTTTTT 120
tcctTTTTct cTTTTtgaa tatcatggac ttggatggt ttaaaatcca atTTTTtacc 180
ctcagttaca gtcactattc atTTTTtatt gagatataat tcagatacca taaaattcac 240
cttttaaaac atacaattca acatctaaaa atgtattcac aaagtgtgg aaccaccact 300
actatctact tccagaatat tcatccctg ccccttgaa agaagccctg cctcttccag 360
caatcacacc ccattactcc ttcccttcag ccgcaggcaa ccgtcacct gctagtcttg 420
tcttgcagat gtgcctgttc tggacatttc gtataaatgg aatcagacaa tatgtgcct 480
ttcatgtctg gcattttca gcacagtgtt tcgaggttca tgcatgtttg tagcattca 540
tttctaatat tccattggat ggatatacca cattttgtac atcagttgat ggatacgtgt 600
```

acgttttana tggaacagtt cccatggcctt ttccactcaa gttaggggtt cctgggggta 660  
aagccaaggt anggnaaaaa 680

<210> 51

<211> 788

<212> DNA

<213> Homo sapiens

<400> 51

ggaatctaaa atccttaaaa atactcta at agccttgagt gaccaacttt ttttttaaag 60  
cacagatgta attgtcta at gttctgatgg gaacgtaaca cttattttta tataaaaaga 120  
gactgagtaa acaaacatta tagaaaaaaa gtgaagtttt ttagttgttt tttgtggtat 180  
tcaaccagca agttgttttc tticagagtt tctccttca aaaagttata ttgcatttac 240  
aatgtttta caaggcagaa agtttgactg gatagttagt gtaaaagctt catgttgaga 300  
tcttcacgta tcattctgct aaaccaga at atgttcagct gtgttactaa tttttcagct 360  
taatcctcag tgcttattat ttacataaca ataacttttt atcagttaca ttttattttt 420  
atttaaactg gccaaaagca aaattatttt atgttaaaat gtgtgctaaa ctatcccagg 480  
aaagtattta atccaacatt gtaaatgaag tatcttgta atataaattt atttcttttg 540  
cagagcatta tattactgga tgtttaattt acaaaatagt tgggtaaatg ttccaacaaa 600  
ctttaaagta ccttgaagtc aaattgtctg tttttgtttt gttgttggtt ttggccgttt 660  
tcctaagggt gttacattaa aactccta ac caagggaag ggttccttaa ggaacaattc 720  
ccttaagggg gataaaagtt gaaaaaagtg gtgccttttt ttttaanggg cttgaaagtt 780  
tcanaggg 788

<210> 52

<211> 718

<212> DNA

<213> Homo sapiens

<400> 52

gatcgcgttt ttccttgatt gtgcggctct gaatacagaa cagctgtag ccttgagttc 60  
gttcctatgc ttgtatctca acaccgactt ccacgtgaag cgggtactga gcgtggggtt 120  
tgacgttcaa gagtgttaag taagcctggg caacctaggg aggcccgatc tctacagaaa 180  
aaccaattag cccgacatgg tggctcccgc ctccagtccc agctactcgg gaggctgagg 240  
tgggaggatt acatgagccc gggagttggg agctgccatg agctatgacc atgccactgc 300  
actccagccg gagccacagt gagtctgcct caaaaaaagt gcagtggctg gaactccacc 360  
aacattaaca gagattcact ggctcttcag agaatcacag ggggtgaagac aagattcagt 420  
gacagggacg gtgtcaacag cccaccgagt tgaattgggt gtcttgtgta atagccctga 480  
gcctggagca tagcaggggc cagaacgacc tcaaagtaca gaggaggcct tggagcttcc 540  
tgctggaggg atacatgggc tagacagagc tttggaaagc ttcctcctcc aagggccan 600  
ccggaggagc aagaagatgc tggtagcctg acttagtgaa agagggacca gctcaagtat 660  
ggggtgacaa gacancaanc cttttaaggg gggaaaggga ctaaggctgg ttaatgan 718

<210> 53

<211> 732

<212> DNA

<213> Homo sapiens

<400> 53

tcaccaattt ggctggcttc gactcctggc tggctcgcac tcctgacctc aggtgatcca 60  
cctacctcgg cctctcaaag tgttgagtt acaagcatgg gccaccgcac ccggcctatt 120  
tataattttt tgaggaaact ttgtactttt tcccatagct gtaccatttt gcatttccac 180  
ctacagtgtt caagagttcc agtttctcca catccttacc aatacttgtc ttttttttt 240  
tttaatggcc atcctggcag atgtaagggtg atatttcac acagttttga tttgcatttc 300  
cctgataact aatgacattg gacttttttt tatatatctg ctggccacct gtatgtcttc 360  
tttgagaaa catctattca agtttctagt tcatttttaa attggattat ttgctttttg 420  
ctattgagtt gtttgagttc cttatctatt ttgaagctta accctataac aaatgggatt 480  
cttatatttt tgtttcatat ttgttagtat atcagggtcca tgaaattagc tatcttaagt 540

aagttgcttt tgtgttggtt cctatgacaa ttccgattag aatattaata caaacgtgaa 600  
atgcagcttt taccaacaaa tgggctaagt tttaatgaat caataaaacc atattttgag 660  
aagtttactc aaanagaacc taaaattcaa gttgaatata aagaaatggg ggttgnttgg 720  
nttttttcct tg 732

<210> 54

<211> 820

<212> DNA

<213> Homo sapiens

<400> 54

tatatgggtt tgtgtaagca gttaatgtaa atattgttag cattacaggt catcacgtgc 60  
tgtaacattt ttttaaagt tgcacctact ttacaattaa aaaattgggtc actcgacctt 120  
caattttgcc catagagcca tttctttgtc tttgtattga agccaattca tttttttaaa 180  
tgaaggctag gccttctatg ttaccaaaat ttttattccc taaaataaac tttttaagaa 240  
acaaatccaa gaatggaaac agatgaaaaa ttttttctt ctttaaagaa cataatagtt 300  
cctgctggaa aaggaaatct aattttattt tgtgtccctt aacagtccta ggaagcacao 360  
ggagaataaa ctaaacctct aagaagggtt taaaaattat ttcaaatgag tgaaaattaa 420  
ctgagcagct tttgtgtgat ttgtcttggt tgtagcatta aaagcaaacc agggttttta 480  
tttatttaaa ggaacatttt tggtttgtac ttttcagtgc cattatgaat gaaaatgttt 540  
taagaacatt catcccttgt gatcatcatg gccactttta gtcttttatt tggaccctga 600  
ctttgagttt ttgctatgcc tgttttttaa gtaaacacag ctttcttct tgaacgtaac 660  
actgcagaat tgcaggaaga gaaaaggga agtttagttan ttactttct gtaagtttta 720  
gggaagantc ctaaaatcct acgaagggtga cccaggttt tcattttaga ccaatgatag 780  
cacattggtg gtnaaacttt tgggaaancc ttccaatgca 820

<210> 55

<211> 776

<212> DNA

<213> Homo sapiens

<400> 55

```

ttaaataatt agaatttcan gatcgggtcaa aatacttttg catctgaaag caggagctta 60
gaaccagaat tccttctcag acataatccc agcatcccca gccagtgct tttgctcttt 120
cgcaccaggc cagataactc tgtgatcatg gacgtatgca ggaatttgta aatatttggt 180
ggatgatagt cagattgcca aatggcagaa aggtttctgg ttttgcagtt tgaaaaggat 240
tatagagcgg ggaacaaggt aaatatctga aggtctgcat gatagtactt cttttcctat 300
tgctttggag ttatTTTTTA tacctcttta cacaatgtgt gagactacca aatttacatt 360
gcactgttcc aggtgacttg tgcagttgac aaactatgac ccagcatagc aacctaggca 420
agaggagcct atataattca ttcttattcc tattttgcta tttcaacttg tttctgtttt 480
ataactgcaa atggcctccc aggggtagca actgttggca acttaaagtt aagccagtag 540
ttctcctcac tccatatcta tgctgcttgt ctttgcatat aaagtgagtg gatgctgggg 600
gcatggaaaa acaaaactat ttaagtgtgg gagaagcctg tgacttttgt agtcctttgg 660
ggaatttttc acatgaccaa gggccaaata gttctganng ctctgtgcc aatcctggga 720
ataanagcaa tggggatggt aaggaggttg aaaagggggg ccaatgggat ttaagt 776

```

<210> 56

<211> 770

<212> DNA

<213> Homo sapiens

<400> 56

```

aatagtgggtg atgtcatgca ggcaatgatg gcggaagggg aggacgtggg atggtggcgg 60
agctggctgc agcagagcta ccaagcagtc aaagagaagt cctctgaagc cttggagttt 120
atgaagcggg acctgacgga gtttaccag gtggtgcagc atgacacggc ctgtaccatc 180
gcagccacgg ccagcgtggt caaggagaag ctggctacgg aaggctcctc aggagcaaca 240
gagaagatga agaaaggggt atctgacttc ctaggggtga tctcagacac ctttgcccct 300
tcgccagaca aaaccatcga ctgcgatgtc atcacctga tgggcacacc gtctggcaca 360

```



gctgagccct atgatggcac caaggctcgc ctctatagcc tgcagtcgga cccagcaacc 420  
 tactgtaatg aaccagatgg gccccggaa ttgcttgacg cctgccaacc agagctctgg 480  
 gcacagattc tgggtggctcc ctgctggccc tcntgggcct ctgctcacac ctgggaaggg 540  
 gctctctaaa tcccgncaa aaactctgac ttgtgccaac aataggatga cccaagggag 600  
 aggaaaccta tcctcctcac cagaagaacc tgtgtttttc tgctgaacac ccactgttcc 660  
 tgaggactcc tgctgggaaa tccaaggga tagttctagc ctttctgcct gtgtnaacan 720  
 aagctaaacc accaagtctc tctcggggga aacctganac aacatactcc 770

<210> 57

<211> 756

<212> DNA

<213> Homo sapiens

<400> 57

gtaattagct gggctcagtg ggcacactcc tgtagtccca gctacttggg aggctgaggt 60  
 gggaggatca cttgacccca ggagtggag gctgctgtga gctatgatga caccactgca 120  
 ctccagcctg ggcaacagag tgagaccctt ggcatcatac tcagatcctt ccaactgcta 180  
 ggatgaagca tacagacaag tgcccactct ggatataggt gttggtgttc tctttctgtt 240  
 tctatgggtc cagtctgtgt tcttttgtaa gatgtctggg caagccagac caaagtctcc 300  
 tatttttact tgctgatcag ggccatgaag aaaaatattt ctaggcttca gatctctgtt 360  
 tacaataccc atgttatgta tgtaaaacac accttccact aaatcttgaa aattttttgt 420  
 tgcaacactg gccataagga caggcaaact tgcccacaca ctcttggccc tgtttgtttc 480  
 tctcagctag ccagtcaccac agctggagct tgcacacctg catctggatg tgcagcatca 540  
 ggtggtactg cacctcgatc cccaacaagt tgaagttttc ttggaagat tcctcagtgg 600  
 atgtgaaatt ctcctctaag aggggaattac acctgagcaa caagggtgt ttcacaaatt 660  
 gaccaggtag acaaaccaag ccangccatt ttcttgggag ctccaaggga tgattcaaaa 720  
 ttcactgggg ggtccccctt aannaccggg aatttg 756

<210> 58

<211> 781

<212> DNA

<213> Homo sapiens

<400> 58

```

cttgaaaagt taacgtagaa aatatccaaa aagcagtatt tctagaaagt gtccaaaaag   60
cagtatttct ttccttgggt tgtgagagta actaattata taaatattac ctcaaaaata  120
catacactgg tatcacacag tctttctaca atgtttctgt attctgaaag ctaaataatta  180
agtactatit ttcattcaa atattcattt agaatttctt ttagaagatg gcagtgatta  240
taatattaat atgatttcat ttgttccagt gtttagacat gaaatcatct tccttgtctc  300
atgaaaacct aaatataaaa aaaaggaaaa tactggagtt tttatttctc ttgtctttgt  360
tacatcctct gtttattata attttagcac caacttcaca cctagctaatt tttttttcat  420
cataaagtgg atgaaatgag caagtaccta aaaattttat ttcagacaaa agtcaggagt  480
tactgctaaa aaacagacat gtaggagaca ttcaacagga gtatgaaatg agagttagac  540
catatgggct gacaacacca taaataacaa gaaaaggagg tgctgaaata ggagagaaca  600
gagcaaattg tagctcaaag tatagactta gaaatatcaa agtaagagct atctggataa  660
atatataaga tattgagtgc ttgggaatcc tagcctacta aggtgaaaaa ttaagtccca  720
aatgtcagga ataacttaca ggaaaaatnn naaaatgcac aagctttaaa aatggggggca  780
a                                                                    781

```

<210> 59

<211> 643

<212> DNA

<213> Homo sapiens

<400> 59

```

ctttttgtga gatttgtgtt ctttaagtctc atctctctga tcataagcca tgttccttca   60
caaaattccc aaatacatta aaagtgtaaa atgtgttaaa agcagacact taacataaag  120
taattcatac tcttctggca ttgcttaagt ccagtagtcc ccccgatg tggttttgc  180

```

ttcctggggtt tcagttaccc acaaccaact acagtcaaaa aataggtgag tacaggacaa 240  
 taagatactt agagagagac cacatcacat aactttcata gtatatTTTT agatttactc 300  
 tattttgttg ggaatctcat gttcctaatt tataaattag gtgnctaatt tataaattaa 360  
 actttagcac aacagataag tatgtatagg aaaaaaacat agtatgtata gggttctgta 420  
 ttatccaaat gcccatTTca gccattcact ggggggTTTT ggaacgtatc tcctgcaggt 480  
 aaaggagac tactgttctt agagacaaaa gatgataaga aatggTTTTa ggttgTattt 540  
 gtggcctcta ttgaagccca aggaaatcat aaaggatttc aacttgaata ccnccaaaat 600  
 gtcagggtta aatcnccata agtgcacata aaaaaatgtc naa 643

<210> 60

<211> 576

<212> DNA

<213> Homo sapiens

<400> 60

gataacataa tcaaagagga aaaaccaagc attgggtgaat tcatcccttc ctttcaactt 60  
 ggctctcttc acccacttta cttttagtgc agagttcagt gatggctagc agctgtcccc 120  
 tgatatttgt tattccaagt atccattcat aggtctgggg agaggttgtg gcaagctttc 180  
 cctaaataaa tcacaccctt atcttctaag cttgagcagt ggaggagac ttttcattcg 240  
 aggtgggtgg ctgaacatca tcattcctgt tctggacttc ttgtaatcat gttggattca 300  
 gagggcacca ctctctcttg tacagatctg acctaacata gacatagact atagcagaga 360  
 tgaatccagg ctataacatt taacaagacc ttattaaaag cttcaagatg ttagccttta 420  
 tctgttccat atctagctta cttggttggt tttgggggat cacatgtctg tcctccaaac 480  
 tggaacgctc taactctcca ggagatgcag tagcattatt tgttggacag tggcacctac 540  
 tggnantttg taangtttat agcccaatgt gaaagg 576

<210> 61

<211> 462

<212> DNA

<213> Homo sapiens

<400> 61

```

cccgcctccc gcctcccgcc tccctccagc tgcgagtgcg gcctcggctg gcggcggcac   60
caggccacag ttgtaaggga tcttgtggct gtcaggatgg cagaggagca ggagttcacc  120
cagctctgca agttgcctgc acagccctca caccacact gcgtgaacaa cacctaccgc  180
agcgcacagc actcccaggc tctgctccga gggctgctgg ctctccggga cagcggaatc  240
ctcttcgatg ttgtgctggt ggtggaggggc agacacatcg aggcccatcg catcctgctg  300
gctgcgtcct gcgattactt cagaggaatg tttgctgggg gattgaagga gatggaacag  360
gaataggtcc tgatccacgg tgtgtcctac aatgctatgt gccaaatcct acatttcata  420
tacacctccg agctggagct cancctgagc aatgtacang na                        462

```

<210> 62

<211> 824

<212> DNA

<213> Homo sapiens

<400> 62

```

tgggtgccc cccgaccggcc tcgagcgccc cggcgggagg tttttctata tgagtggaga   60
agacagctgt taccaggag gtcatacaac attttttag gatgtctgaa gatgaagaaa  120
aagtgaatt acgccgtctt gaaccagcta tccagaaatt cattaagata gtaatcccaa  180
cagacctgga aaggtaaga aagcaccaga taaatattga gaagtatcaa aggtgcagaa  240
tctgggacaa gttgcatgaa gagcatatca atgcaggacg tacagttcag caactccgat  300
ccaatatccg agaaattgag aaactttgtt tgaaagtccg aaaggatgac ctagtacttc  360
tgaagagaat gatagatcct gttaaagaag aagcatcagc agcaacagca gaatttctcc  420
aactccattt ggaatctgta gaagaactta agaagcaatt taatgatgaa gaaactttgc  480
tacagcctcc tttgaccaga tccatgactg ttggtggagc atttcatact actgaagctg  540
aagctagttc tcagagtttg actcagatat atgccttacc tgaaattcct caagatcaaa  600
atgctgcaga atcgtgggaa acctagaag cggacttaat tgaacttagc caactgggtca  660

```

ctgacttctc tctcctagtg aattctcagc aggagaagat tgacagcatt tgcagaccat 720  
gtcaacaagt gctgctgtga atgtttgaag agggaancaa anncttaagg gaaaggctgc 780  
aaaaatacaa gcctgggaag ctccgccctg tggcaaggctg cacc 824

<210> 63

<211> 730

<212> DNA

<213> Homo sapiens

<400> 63

agtctgggtc tggagcctga gccctgcgga acctcggcgc ccggccccac cccgcccgtg 60  
cctgcactta tttattgttg ttatttctta ccgcggagcc ccgcagtcgg gtcctcccgc 120  
ccgctcccgc gcagcgctag cattctccag tccctcagtc ccttcccgcg cgggtgcgccg 180  
cagccgaggc gatgcgccac attcagaaca tgtgcacat cgccgagtag cccgcgccgg 240  
gcaacgccgc ggcctccgac tgctgtgtgg gcgccgccgg ccgccgcctg gtcaagatcg 300  
ccgtggtggg cgccagcggc gtgggcaaga ccgcactggt ggtccgggtc ctcaccaaac 360  
gattcatcgg tgactatgaa agaaatgcag gtaatctcta tactagacaa gtccagatag 420  
aagggtgaaac cctggctctt caggttcaag aactccagg tattcaggtc catgagaaca 480  
gcctgagctg cagtgaacag ctgaatangt gcattcgctg ggcagatgct gtggtgatcg 540  
ttttctccat cactgactac aagagctatg aactcatcag ccagctccac caagcacgtg 600  
cagcagctac acctgggcaa ccggctgcct gtggtggtcg tgggcaacaa aagctgacct 660  
gttgacatc aaacaagttg accctcaact tggactgcaa ctaaccanca tgctangctg 720  
ctcaattcna 730

<210> 64

<211> 746

<212> DNA

<213> Homo sapiens

<400> 64

```

aattataatg gatttgaaat ttgccctaac caagagtcac agacagaaaa aaggaagtta 60
atgtatctct tgatcactgt caagatgtgg tattgaacct tcaagatcct tttcagggaa 120
tatgtgagat caaaattttt atactggcac tatgatgtta ttgcctttt cctcatattc 180
acaagtgaac agtggagttt tacagaagct atataatgtc atgacatcac tgatgggtaa 240
tagaatgtgt gcttgtatat tccgaaactt tcagttccaa tttcttcgat caatgtaatc 300
ctcataagta aaagttatit gaggacctca gacattttta aaaatgtaaa ggggggtgggg 360
tcaggctcag tggctcatgc ctgtaatccc agcatttttg aaggccgagg cgaacggatc 420
acttgaggcc aggagtttga aactagtctg gtcaacatgg tgaaaccccg tctccactaa 480
aacaaaaagt tttctggatg tggtaggcaca catacctgta atcccagcta ctttggtggc 540
tgaggcatga gaatcacttg aaccagaag acaggttgca gtgagccaag attgtgcccc 600
tgcattctag cctgggtgac agtgagactg tctcaaaaaa taaaggtgta cagggantgt 660
atatttgaca acttggtatg tanggatgtg ctacctnaa agttccatgc tgttacctaa 720
gttttcactc actactatat tttggg 746

```

<210> 65

<211> 836

<212> DNA

<213> Homo sapiens

<400> 65

```

agaaacctga attcagactg attaaagaag gtgaaacaat aactgaagt atccatggag 60
gtgcgttcct tatgttacct ggggccgact accttcgctg tgattatit gaaatagtgt 120
tggtttagaa atattgaaca tctgatattt tctcttagtt cttattttat aaaaattgtg 180
ggaattatit cctcagctat gagttcttat tagctggtca gaaataaaac atagttagct 240
tttaatggat ctagttagaa ttaatttatc tattaagtca ctgggcccaa caaatgtca 300
tgatttttgc atatacaagt gaggattgtg gaataaaatt gtaacattaa tgtcagtata 360
aaaggaaata ttagaaacag taggaaaaaa tgaccattgt ataagtctct gtctaataag 420
ccactccact actaggattt atgatagggc tccattcca atgatataga actccctggg 480

```

attctcacta agtattttatt ccacatccag aaaacaagta tggcatggag agttaggatg 540  
 tcaaatggcc ctctctctca accaagattc aggacatagc tattaccttt tagatcccta 600  
 ttgatatgat ttttggggga tatgttctaa aaatgtttat gattgaatct taaatggtaa 660  
 tattttaga aatatagtta atcattacaa tgtcnagctt atgggatgta tagtcacaat 720  
 atgagggtaa aatcaaagtc atttgtantc ccctgctttt anaggccaat ttatttaaaa 780  
 aaatacacca aaaatcaatt ggatnggagt gccctgtggg aaataacttg aaaaaa 836

<210> 66

<211> 724

<212> DNA

<213> Homo sapiens

<400> 66

cttgaaaaaa gcgaattcaa agatgaaccc ctacttttcc gttttttttc ggatgaggaa 60  
 atggagggat caaatatgaa acatcgactt atgaaacatg acttaaaagt tgtggaaaat 120  
 gttatagcta agtcattatt gattaaatcc aatgaaggca gctatggctt tgggctagaa 180  
 gacaaaaata aagttccaat aataaagttg gtagaaaagg gatctaagtc tgagatggct 240  
 ggcatggaag tcgggaaaaa gatttttgct attaatgggtg acctagtttt tatgagacct 300  
 ttcaatgaag tggattgctt cctgaaatcg tgtttaaaca gcagaaaacc tctaagagtt 360  
 cttgtgagca caaagccaag agagacagtg aaaattccag attcagctga tggacttggc 420  
 ttccagatcc ggggatttgg cccttctgtt gtgcatgctg tangaagagg aactgtggct 480  
 gcagcagctg gtcttcaccc tggacagtgc attatcaagg tgaatggatc aatgtcagca 540  
 aagagacaca tgccagtgtc attgcacacg ttacagcctg cangaagtac aggcggccaa 600  
 cgaagcaaag attccatata atgggtttat aatagcattg agaagtgctc aagaagacct 660  
 tcaaaaaatc tcantccaag cccctggag atgaagcang ggatgcnttt gacctgtaaa 720  
 agta 724

<210> 67

<211> 713

<212> DNA

<213> Homo sapiens

<400> 67

```

atgacagggt cctgggcccgc gccgcctcgc cctgcctggg cggggttggg acctttctgg 60
cacctgcgtc gaagccggcg gcaggatgga ctttgttgtc ccggtcccag accaccctcc 120
tccaccgtcg cctcccactg caaaaaggcc tggataagga acctaattcg agctaccctt 180
ctctgtgaag ctgcacggct gagaacgtca gggcttgttc ccaagtctct ttccagaggc 240
caggctttat gggagcatgg gttaccagcg acgcaccctg atcaagcaga gaaagagagg 300
ctggagaagg aagagtgaca gaagtaagaa gagagtgtct ctccacttcc actccagccc 360
cctacagctc atcctccagc aggcagccaa gggcactttt aggatctcac atcaggctct 420
tgcctcacat tctgactgg ctcccaagt aattaaagta aaatccaaat tccagctcac 480
agcttanaaa actcagcagg actggcctct gtcctatccc acacccaac tcagtcctc 540
aagctcatct cctgtcattc ctgcccattt ctggacccca gccactcctc aaacanggtg 600
aggatcagtg tccaaggcac aatcttgaac tcatcatcgc caaatatgtg agcacttgat 660
gttggncctc caacctccan accgtaaggc agtacatttc cttgtaaaat tan 713

```

<210> 68

<211> 860

<212> DNA

<213> Homo sapiens

<400> 68

```

aaaaaactag caccggcccc gcattgcactc agcctgccaa gaccacagcc ttgtaaggat 60
aagttactta atttagtttc acttgggtcat aaagcatgag acagcctcat ttactggctt 120
ctgcttttaa tgctttatca aggataagga ggaacttcta atcatTTTTT ttgaaacttt 180
tatatgtgtt aagttttcag ggcaatagac aaagacagat aatctacagg gtaacttccc 240
aacaagatag ttctgtcttg caagtcatca gtgggcctga aacatctgta caagaagaga 300
tatctgtgga tgctatgcat gtcttcattg atgaacatgg ggaaattaga tcctgttatt 360

```



taaaatctgg aaatcagaaa gaaggccctt tacagcctct accatcaa atgactgtc 420  
 tctctcaggc tcgagagatg caggtcagct cctccagtac cacaacttct gagagtcaag 480  
 atccgtcttc tggggaccct gccgtcagtg cccttcagca acagctgtta ctgatgggtg 540  
 ctcgcaggac ccagtcggaa accccacggc atgtgagtca ggatctggaa gcctcgtcat 600  
 gttcttcaac acaaggaaaa ttttaaccgag agcagtttta caaatattatc attttccctg 660  
 gcaagtggat taaagtctgg tatgatcgac tgaccttgct gggcattacn tgatcgaact 720  
 gaagacatca agggagaatg tactggcgat ttacttcaat ggcctgggtt ccctccttgg 780  
 atttctgacc ttgagccaan ggttttgcaa agatatgtgg gtgctcccct tcngcctccg 840  
 tcaagggcaa gtggcantaa 860

<210> 69

<211> 806

<212> DNA

<213> Homo sapiens

<400> 69

aataatttat agcctttccc ttaaatacaag atcgagttta aaattatagt ttgtcttttg 60  
 tcttaacagt tctgaatgct gtcctcaaag tatataatgt ttcattgtacc aagacccttt 120  
 tcacagtaca ataaacagat ctattcataa atttttgta tttataaat aaatgattac 180  
 ataatttttag ttatatggca atggatttct tttagttggg ttataaattt ctattataaa 240  
 tttaaattac tgagttgtga atatatgcag ctttattaag agaatttaca aattcaatga 300  
 tataaaataa ggtaggcctt gattcacttg gttgtttttt acttatttaa tattccaaca 360  
 ttgctatctc taaaaatgca ttatcatgtt ttgaagggat ttgctcttga atttagctcc 420  
 agggagaaaag tatcaaaata actttttttt ttttttttga gatggagtct ggctctgtca 480  
 cccaggctgg agtgcagtgg cgtgatcttg gctcactgca agctccacct cccgggttta 540  
 caccattctc ctgcctcagc ctcccaagta gctgggacta caggtgcccc ccaccacgcc 600  
 tggctaattt tttgtatttt tagtagagac gggctttcac catgtttggc angatggtct 660  
 cgatctcttg acctcgtgat ccgcccgcct cagcctcccc gagtgttggg gattacaggc 720  
 atgagccanc gcaaccgggc caaataact tgagaaaaca gatngctctg cagtttaaag 780

gaagtataag tnccccgaac ctgaat

806

<210> 70

<211> 839

<212> DNA

<213> Homo sapiens

<400> 70

```

aaaaaaaaat agatgctgcg tccaagcgtt accgtggctg taccttggcc tctgcagcct 60
cctgggtgggg gaggcagagg ccccgagccc cgtggatccg ctggagcgga gccggccgta 120
cgcggtgctg cgagggcaga acctggagtc cctgtcgccc aggctggagt gcaatggtgc 180
gatctcggct cgctgcaacc tccgcgtctg gggttcaagc gattctcctg cctcagcccc 240
ctgagtagct gggattacag tgttgatggg aaccattttc ggcatcctgc tggtagactgt 300
catccttatg gcattttgtg tctacaagcc cattcggcgt cggtgacagc cagacaagtt 360
cttcaatgag tatttgggaa taggataagt tgtgttgcac acaggccagt ggagaagttg 420
gaacaaaaac tttcctactt ggaaatgacc tttggctctg acagttggta aatgctaaat 480
gaagtagaag aaaacatgta ctagacatta ttttttcta acactgtagc gcaaataatt 540
ggcccctgag tccgcttctc agtgtttctg actgtacttg ttaaaagtaa gacctgaaag 600
ctccaaaggt cagtgtaaag atggagtgtt catgagaaag aaaacatggt aaccttgtga 660
gtgcctgtaa gaaccacact gtaaagaact catcattaat gcttgaaaaa tgttattaaa 720
gaaaggagac ttaccaagca ggacattccc taattaaaga aaccaatttg ggtacagtgg 780
ggttaanaat cacaagattt ttttttttaa acccaacctg aagtttancc taaaaatnc 839

```

<210> 71

<211> 793

<212> DNA

<213> Homo sapiens

<400> 71

agaaattttt tctgtgttgg acctaatagaa agtggacatg gccaaactttg ctatcagtag 60  
 catcaggcct catctcatgc agcagtcagt tgaatacgaa aggaagaagt ttcaagagat 120  
 tttggagagg caaccaaatt ccctggactt tgtcaccag tggctggaag aagcctcaga 180  
 ggaccttatg actcagaagt ataaacacgc cctgccagtg gggggaatgg ctgctggctc 240  
 tggggacatg cccaggctga gccctgttgc tgtccagaat tacgcttacc tgaagcttct 300  
 gaagtgggac cacctccaga ggccgttccc cgaaacagtt ttaatggacc agtctcgctt 360  
 ccacgagctc cagttgcagc tggaacaact gaccatcctg ggggctgtgt tgctggtcac 420  
 cttcagcatg gcagcgccag gaatttccag ccaggccgac tttgctgaga aactcaagat 480  
 gattgtgaag attttgctaa cagatatgca cctgccctcc ttccatctga aggacgtcct 540  
 cactaccatc ggggagaagg tgtgcctgga ggtgagcagc tgcctctccc tgtgtgggtc 600  
 ctctcccttc aacacggaca aggagaccgt gctcaanggc cagattcagg ccgtggccag 660  
 tcccgatgac ccattcgca ngatcatgga atctcgaatc ctgaccttct tagaaaccta 720  
 acttgcctcc gggtcactctg aaagccaatt gccacagtc cctggggggg actcagtcca 780  
 gtttaanana naa 793

<210> 72

<211> 724

<212> DNA

<213> Homo sapiens

<400> 72

gcggtgcctg atggggccgt tgggcggccg gtagctgttg ctgttggggg accccctcat 60  
 tcctgccgct gccgtccctg ctgcctcatg gcggccatcg gagttcacct gggctgcacc 120  
 tcagcctgtg tggccgtcta taaggatggc cgggctggtg tggttgcaaa tgatgccggt 180  
 gaccgagtta ctccagctgt tgttgcttac tcagaaaatg aagagattgt tggattggca 240  
 gcaaaacaaa gtagaataag aaatatattca aatacagtaa tgaaagtaaa gcagatcctg 300  
 ggcagaagcc agaaatgcgg tccttggacc tggcttctca gcttctccga aatcagatag 360  
 tgactgaccc agacaactta atggaggatg ctgcttgggc caagcactgt gatcagaact 420  
 tagtggcctc tgacgcccc aagggaagagg gaaccggcat tctaaaatca aaaaggactc 480

aggcagctga tcacagcct atcttgaaaa cagttaaggc atcagatgag gattgtcagc 540  
 taaagaatca gtgaccgat acgagaaacc agtgacctg aggactcctg ggatgaatcc 600  
 tcgggtgcag ggtgctctca agggacccca gctacagcaa gctcccacaa gccttttcag 660  
 angtgcaatt gctccctgtc agagcagccc atnggcaaac tggggtgtnt cccggggaag 720  
 ccaa 724

<210> 73

<211> 736

<212> DNA

<213> Homo sapiens

<400> 73

aagagatgac aaggtaacat ggacgttttag gctccaggaa actttaagac aaattaacgt 60  
 aaaaatggtt tctgggctgg taataccctt ggtgtttctg ttaaaaacat gaagaacggc 120  
 tgggcgtggt ggctcacgtc tgtaatccca gcactttggg aggccgaggc ggggtggatca 180  
 cctaaggctc agagtctgag accagcttga ccaacctgga gaaaccccat ctctacttaa 240  
 aaaattaagg catcctacat gcctgtaatc ccagctactc agaaggctga ggcaggagaa 300  
 tcgcttgaac ctgggaggcg gaggttgtgg tgagccgaga ttgcgccatt gcactccagc 360  
 ctggggaaca agagaaactc tatctcaaaa aaaaaaaaaa aaaaaaaacc tgaaaaacat 420  
 tttctggagg aaatttcatg gtttagatca caaggaattt cagataaagc aagccttgca 480  
 aaagatatgt tcatagtaaa ttgcagagct ttaggaaaca tttcactgaa atgagagtca 540  
 atgacaaata ggattagagc ctctaacagg ttatctgaga gaatatTTTT acgttttaaa 600  
 ttgttaaaat aaacctaaag gaaggaatca accctaaaga tcaaggttgg ccgggtgcgg 660  
 tgggctcaag cctgtaatcc caaccctttt gggatcctga accaggtggn tcacctgagg 720  
 ncanaagttc gagaca 736

<210> 74

<211> 651

<212> DNA

<213> Homo sapiens

<400> 74

```
cctacaattt ttagtttacc acttatctct tacagaagca agtgatttcc taccctaga 60
tttttagtaa caccttaaaa atgtattgaa aacaaaaatt aagttacatg tcataatctc 120
agaagtagac atacagatat acctgtcaac atttttctc attataaacc aatttcagct 180
cacatcagag ttataatttc aaagccagac atgatactgg tttaaaatga atgttatgtt 240
tttaatgttt ctctctctcc caaaaagcag caatagtagt agatttaaca ataccataga 300
ctcatgacta tgaaatcgtg gctatttgtg ttaacatgtt gttcctgttg ttgatgtgat 360
acaaagctcc tgcaaaacag ctggcacagt ccagtgcact ggcttccctc actggactcg 420
gtaagtgttt tccatatttg tgagagggcc taaagggaaa aatcacacat acattgtctc 480
tctgcgtgtt ctattttgaa actgtattag tcctactcag tttataaaaa cctaggtctt 540
agggttatgt catcctgtct aaaaagggtt gcctattttt ttgactaacg cattcacagt 600
gagaaattta taaatgtgat gggtaattca tagnttaatg ggggcangnt a 651
```

<210> 75

<211> 691

<212> DNA

<213> Homo sapiens

<400> 75

```
gagtctgcga acggagcagc tgctgcagca gggcccatgg cggacaccca gtacatcctg 60
cccaatgaca tcggcgtgtc tagcctggac tgccgtgagg ccttccgcct gctgtcacc 120
acagagcgcc tctatgccta ccacctgtcc cgtgccgcct ggtacggagg cctggctgtg 180
ctgcttcaga cctcccctga ggccccctac atctatgctc tgctcagccg cctcttccgc 240
gcccaggacc ccgaccagct gcgccaacat gccctggctg aaggccttac cgaggaggag 300
tatcaggcgt tcctggtcta tgccgcgggt gtttactcca acatgggcaa ctacaagtcc 360
tttggtgaca ccaagtttgt tcccaacttg cccaaggaaa agctggaacg ggtgatccta 420
gggagtgagg ctgctcagca gcaccagaa gaagtcaggg gcctctggca gacctgcggg 480
```

gagcttatgt tctctctgga gccaaaggctt cgacacctcg gactggggaa ngagggaatc 540  
 accacctatt tctctgggaa ttgtaccatg gaagatgccc ggggccgcct cgaccgcac 600  
 aagatccggt ctgtgggcaa agcctgctct aaangcgctt cctgcggana cttcaagggtg 660  
 ctgaaagtcc aacangggaa tttggccggg a 691

<210> 76

<211> 781

<212> DNA

<213> Homo sapiens

<400> 76

atcttcaaca aactttacaa aaacaagcaa tggggaaagg aatccctatt ttaacaaatt 60  
 gtgctgggag aactagctag ccatatgcag aaaattgaaa ctggaccctt tccttatacc 120  
 ttatacaaaa attaactcaa gatggagtaa agacttaaat gtaaaatcca aaactataaa 180  
 atccctagaa gaaaatctag gcaataccac tcaggacaca ggcatgggca aagattgtat 240  
 gatgaaatcg ccaaaaggaa ttgcaacaaa agcaaaaatt gacaaatggg atctaattaa 300  
 actaaagacc ttctgcatag caaaataaac tgtcatcaga gtgaacagac agtctacaga 360  
 atggaagaaa atttttgcaa tctatccatc tgacaaagggt ctaacatcca gaatctacaa 420  
 ggaacttaag caaatttaca agaaaaaaag aaccccatc aaagtgggc aaaggacata 480  
 aacagacatt tctcaaaaga agacatacac atggccaaca aacaagaaaa aaaggtaaac 540  
 atcactaatc attagagaaa tgcaaatcaa aaccataatg agataccatc tcatgccagt 600  
 cagaatgggtg attattaaaa agtcgagaaa caacagatgc tggcaagggt tcagagaaac 660  
 acttttacac tgttgggtggg aatgtaaatt agttcaacca attgtgggaa gacanggggtg 720  
 gtgantcctc aaaggattta ggaactggga aatatcattt gaccagcaa tcccantact 780  
 a 781

<210> 77

<211> 838

<212> DNA

<213> Homo sapiens

<400> 77

```
cagaaaagca aaaaccaaga ggtcaagaaa agcagtcag agatggagga tgctcgcgtg 60
ctttcaaaaa agcagcctga cgtgtcctct agagaggtca ttctgtgag ggaaggagag 120
gctgaaagaa agcctgtgag gaaagaaatt cttaaaagag aatctaaaaa aatcaaactg 180
gacagactta atactgttgc cagcccaaaa gactgtcagg agcttgccag ttttctgtt 240
gggtctggct caaggcccag ctacagacct caagcaagac tgggagaacc agcaggtgaa 300
tctgtggaaa atcaagaagt ccaatcaaaa aagcccatc cctcaaaacc acagctcaaa 360
cagctgcagg tattagatga tcaaggacca gagagagaag acgttaggaa aaactattgc 420
agtcttcgtg atgaaacacc tgaacgtaaa tcaggccaag agaaatcaca ttcagtaaat 480
actgaagaaa aaattggcat tgacatcgat cacacgcaga gttaccgaaa acaaatggaa 540
cagagtcgta ggaaacagca gatggaaatg gaaatagcca agtctgagaa gtttggcagt 600
cctaaaaaag atgtagatga atatgaaaga cgtagcctcg ttcacgaggt angcaaacc 660
cctcaagatg tcatgatga ctctcctcct agcaaaaaga aaaggatgga tcatgtcnat 720
tttgatatct gcaccaagcg agaacgggat tacagaagtt cagcccaaat cagcgaagat 780
tctgaaaaga ctgggtgggt tcnccantgt ccgacatggg tccctccant gaagatta 838
```

<210> 78

<211> 800

<212> DNA

<213> Homo sapiens

<400> 78

```
gtgttactga tgtcaacctt aaataacaat atccangata atattgttac cagcggtag 60
tccagctatc tggagaaact ccagaatggc aactttgtgg caatttcagt tctttgtctt 120
ctggaaggaa agatttcaaa tgagagacac aggcaaggtt taaagcagga gggagaattt 180
attttaagca aagcgagaat ttattagaga gactacactt gaaggagagc catgtgggtg 240
acttgaaaaa tcaagtgtgt tgtttgcctt agtcacgccc cccacagcca tgcctgggca 300
```

gttgtttaaa ggtatittgt tcctaactgc ctccccatt atcttcatgt acctggaatt 360  
 tgtgatacaa tgaacaataa tatagccaat ccatagctta tgttatttta atgtaaattc 420  
 tttgtaaaca acttaggaac agcctcttcc tttatcttta aaatcccact tgtaactgct 480  
 actaattgaa gtgtatatc agggcacttg aatctatgct ccactgagc tgttcttaag 540  
 ttttgggctc aggtgaactc taaacttagt catagaatan ggtgtagac atgagcaggg 600  
 caagagagag ggcccccaag aatgttgggc agttgtcaag ccatggtcag gcaattataa 660  
 atctgtcccc ctgaaataat gagcaagaga agggaggaac ccagancgtg tctgggtcca 720  
 ataaagtaac ngncagcag gcataaaacc gtccctccaa agataataag ttgggcatga 780  
 ctgggtgcct ggaaatgaca 800

<210> 79

<211> 808

<212> DNA

<213> Homo sapiens

<400> 79

tattgtacaa attcgccaat attcaacagc gttcttaaac tgaacaagca tatcaaagag 60  
 aatcataaaa acattccctt ggccctgaat tataatccaca atgggcagaa atccagggcc 120  
 ttaagcccc tatctctgt ggccatagag cagacatctc ttaagatgat gcaggcagta 180  
 ggagggtgcg ctgcacgtcc cactggagaa tatatctgta atcaatgtgg tgctaagtac 240  
 acatccctag acagctttca gactcaccta aaaactcatt tcgacactgt gcttccaaaa 300  
 ttgacctgtc ctcatgcaa caaggaattc cccaaccaag aatccttgct gaagcatgtt 360  
 accattcact ttatgatcac ttcaacgtat tacatctgtg agagttgtga caagcaattc 420  
 acatcagtgg atgaccttca gaaacacctg ctggacatgc acacctttgt cttctttcgc 480  
 tgcaccctct gccaggaagt ttttgactca aaagtctcca ttacgtcca cttggctgtg 540  
 aagcacagta acgaaaagaa agtctatagg tgcacatctt gcaactggga cttccgcaac 600  
 gaaactgact tgcagctcca tgtgaaacac aaccacctgg aaaaccaagg gaaagtgcatt 660  
 aagtgcattt tctgcgggtg agtcccttgg cancgangtg gagctgcaat gccacatcan 720  
 cactcacagt aagaagtaca actgcaagtt ctggtagcaa aaggccttcc aatggcgatt 780



aatttttggtt agnaaaaaaca ccttgnga

808

<210> 80

<211> 741

<212> DNA

<213> Homo sapiens

<400> 80

tttttaaata cagattttta tttaaccctc ttgcatatac atataaaata acaaaaaaat 60  
 aaaatattga gatatacatca agaaatttct acagcttcac attcaaactc ttcagcactt 120  
 tcagagctat tgatatgcat atgtccacct agtaccatct tctgtgcttt cagaattatt 180  
 ggtaaggctg catttcctga gtgctctacc acacttatgt ctggattttt tttaccagc 240  
 tacagacca cactcctgca agatttgata cccttctatt tggcaaaact cagtttcact 300  
 tttctttcag tttaatcaca ggtccttaga agatcggacc tgtgattcta ttcaaagtca 360  
 gaaagagatt tctcacaat tgatgtcata ttaacatgtc aatatgaaaa ttattgtttg 420  
 gtaaaccaga agtgacctgt ctgaagccct caattgtggt atttgtgtgt ttgttttttc 480  
 tttttcaaga ttctttttta agaaaatata tggtagctgt tgtttaacat ttatctactt 540  
 acagagcgtt cagaggatgt tataatgttta ttaagtgtc aatactgtat tttaacctaa 600  
 tctgaatttt aatcataatc ctgcacaatg catggattct ggntgctttg aaatggttct 660  
 gttcaaagga cttatcaatg tctcntgctt tgagatgtat tgcntgggtg tgtagtagca 720  
 caaacgtacc accaataatg t 741

<210> 81

<211> 889

<212> DNA

<213> Homo sapiens

<400> 81

aaattttagg agattctttg aataaacctc atttagtctc tctcctataa aaggaaaagc 60

agaacctcaa gtccacattt attttgcatt tgctctcttg ttcacattct tctctatgtc 120  
aataaaagtt agatggcatt ttttatagct gtgtatcaaa tatgtgaata tagaattcca 180  
actaaaatag caatagatgg gaaaactttc tagttcattc attgtcaaaa gtgagtgctg 240  
agaggacatc tgaagcccca cctaaaagta aatcctcagc aggaaagata atgcagataa 300  
attttgggtc caaattctta atctgggcaa agaaagaaaa caaacacact tactagatgg 360  
atttttcata aaagtccctt tccatgctgt ccaaagtgat taaattagtc atccattctt 420  
ttatctcttc tgttgataat catataagca actcctgaat ctatatgagt attcagtctt 480  
ctttattatt cagaagattt gccattttag tcaactcaaa tatcagtact atttcatagc 540  
atgctagttc aggttacaca aagcccacca ggtacacctg gaatctagcc agaatgcagt 600  
ccaatcatga gcactttaaa catttacctc attttactat ttgtcttaga gctatggnaa 660  
cattantctg ttctggagta tctcacactt cangagcatt agttgaagca gtacagatac 720  
agttaagtgt cctctccgga cattcatttg ttaactttgg aaacaactng gattcaaaga 780  
cccttaaggt taaaaacaaa ccttaatggc ctattttatg ggaagaaaaa acctggttaa 840  
ttttaatccn gggttttaaaa agttaaaaan cggttggcct ccnaccaac 889

<210> 82

<211> 810

<212> DNA

<213> Homo sapiens

<400> 82

agaaacatcg agaaaaagaa gctcaaaactg gaggattata aggatcgcct gaaaagtgga 60  
gagcatctta atccagacca gttggaagct gtagagaaat atgaagaagt gctacataat 120  
ttggaatttg ccaaggagct tcaaaaaacc ttttctgggt tgagcctaga tctactaaaa 180  
gcgcaaaaaga aggcccagag aaggggagcac atgctaaaac ttgaggctga gaagaaaaag 240  
cttcgaacta tacttcaagt tcagtatgta ttgcagaact tgacacagga gcacgtacaa 300  
aaagacttca gaggggggtt gaatgggtgca gtgtatttgc cttcaaaaaga acttgactac 360  
ctcattaagt tttcaaaact gacctgccct gaaagaaatg aaagtctgag acaaacactt 420  
gaaggatcta ctgtctaaat tgctgaactc aggctatttt gaaagtatcc cagttcccaa 480

aaatgccaaag gaaaaggaag taccactgga ggaagaaatg ctaatacaat cagagaaaaa 540  
 aacacaatta tcgaagactg aatctgtcaa agagtcagag tctctaattg aatttgccca 600  
 gccagagata caaccacaag agtttcttaa cagacgctat atgacagaag tagattattc 660  
 aaacaaacaa ggcgaagagc aaccttgga agcagttatg ctagaaaacc aaatctccca 720  
 aaacgttggg atatgcttac tgaancagat ngtaagaag aagaaacagg agtcnntaa 780  
 gtccctggga ggcttctggt aagcacaaga 810

<210> 83

<211> 789

<212> DNA

<213> Homo sapiens

<400> 83

tagaggggaa gtcctatact gtgtgcttca tagtggtatt tctaatagata acttttgtgg 60  
 gaaagcagcc tcgttatagc tggatcctag attagtccag tgaattttta taagaaatta 120  
 cactgttgta aactcacctc ttatgcattg gtcagtgatg agatataat ataaatagat 180  
 agatagataa aatttgctct tatatagcca ttatttcac attggccctg tttggcccat 240  
 cctcagtgtg gctgtgagat tattgataac tggtcactgt cagataaat acattctatt 300  
 aggaaacacc tatatagggt atgcagaaac atgcagaaat gccacctgtc catacttacg 360  
 tggctttaca taaacaaaag actgtcttgt ctttgtggtg actgaattta caacgtcctc 420  
 ccctggaaat ggaaaagtac ctatcaggag atgtatgaca aaagaaatta tcaagcctga 480  
 ctcatatat attatgaaca gtctagagga agcatcttc ttagaactaa ggaggtctgc 540  
 tgaacattgg ccacattctg gactttcatg aaaatcatgg acccagagtt ggggttaagc 600  
 cacttagaaa aagctgttga aaacatctca aagggcactg aacaattttt aaattacact 660  
 taacatgccca ggtatctang tatctagtgc ttttagcaat attatcaata ttatcaaggg 720  
 cccagcttct ttngtccct ccccttgcg attccccctt ttttttttt tttgcctttt 780  
 taaaaatnn 789

<210> 84

<211> 696

<212> DNA

<213> Homo sapiens

<400> 84

```

atttgacatg ctgcttcctt tctgatgggc tctaacttca gcttttcggt ctcattcaga 60
gtagagaaat taacagattt tactggcggg tgttttcaga ttaagaaact caaagggcag 120
ctggaggaga gacagaagat tggcaaacta gacaatcttc gatctgaaga tgatgtcttg 180
gaaaacggga cagacatgca tgtaatggac ctacaaagta aatgtcaatt cttgtgtaga 240
agtaaagct ttcacatgtg ctgttttagt atacttgtgc tggcagagaa aactgtcag 300
gcaaagaatg ccttcattcc ctcacatccc cacaaaagcc cttaaaaata aaagcacaag 360
gaggggtagg tagacagaac aatgggtgtt ctctctgagc ctatgaaata gaacaggtac 420
ccaaaaacgt gcaccaagat accaccacat gttgtgccga tggaaaccac atttactttg 480
ctggatacag caatctttcg atctgttgat tgtatgaaaa aaaaaaaaaat gaaaggcttt 540
tttcatgcta ataaactana aacagtctta aggagataa aattatgccc agtctctctc 600
cgcccttttc cctaccccct acnatctctt tgtcttcttc actcataagg cactctcttg 660
cctgangggt ccngcccca gcacaagggg cgggaa 696
    
```

<210> 85

<211> 498

<212> DNA

<213> Homo sapiens

<400> 85

```

atTTTTtagta gagatggggt tttgccatgt tggccaggct ggtcttgaac tcctgacctc 60
aggatgatcca cccgcctcgg cctcccaaag tgctgggatt acaggcgtga gccaccgcgc 120
ccgcccttct gtctttgtct ttcttattca ctattccagt tttcttcacc ttctcccttc 180
tggaaggcca ctcttctggg tggaggggac cagacttcag aaggtactga cctcttcttc 240
ttgttctctt tggggcactt ccttcctcct agccaacttc acgttgccag atgttgggga 300
    
```

分 冊  
Separate Volume

出願番号 平成11年特許願第248036号  
[ST.10/C]: [JP2000-183767]

分冊番号

2 / 4

出証番号 出証特 2002-3046774

特平 1 1 - 2 4 8 0 3 6

cttcctggat gaggttctgt tcattgagct gcagcgggag gaagcggaca agctagttag 360  
gcagtacaac gaggaaggcc gcaaggctgg gccaccccct gaaaagcgct ttgacaaccg 420  
aggtggtggt ggcttccggg gccgcggggg tgggtggtggc ttccagcgct atgaannccg 480  
aggaccccct ggaggnaa 498

<210> 86

<211> 750

<212> DNA

<213> Homo sapiens

<400> 86

tgagaagaga tttaaatttc catgtcttct tggaatataa tcaagatttg agtgtgagag 60  
gaaaaaataa aaaagagaaa cttgaagact tctttaaaaa catggttaaa tcagcagatg 120  
gagtaatcgt ttcaggagta aaggatgtag atgatttctt tgagcacgaa cgaacatttc 180  
ttttggaata tcataaccga gtttaaggatg catctgctaa atctgataga atgacaagat 240  
cccacaaaag tgctgcagat gattacaata gaattgggtc ttcattatat gctttaggaa 300  
ctcaggattc tacagatata tgcaagtttt ttctcaaagt ttcagaactg ttcgataaaa 360  
caagaaaaat agaagcacga gtgtctgctg atgaagacct caaactttct gatcttttaa 420  
aatattactt aagagaatct caagctgcta aggatctcct gtatcgaagg tctangtcac 480  
tagtggatta tgaaaatgct aataaagcac tgggataaag caagagcaaa aaataaagat 540  
gttctacagg ccgaaacttc ccaacaatta tgttgcaga aatttgaaaa atatctggag 600  
tctgcaaaaac aagaacttat ggattttaag acaagaagag ttgctgcatt cagaaaaaat 660  
ttagtgggaa ctggcagagt tangaantgg aaagcaattg caaaggggta atcctacaag 720  
ttggcctgca anaaaactgg ccttggcaaa 750

<210> 87

<211> 696

<212> DNA

<213> Homo sapiens

<400> 87

```

ttcaagatgc ttgtaaata tatcaaccgt ttatttagtc caccctgaa gaactgaggg 60
tcctgggaac tgaaccatat caatgcaatc ttttctacat tattaactga agaaaaatgg 120
gtacttttta aacttttttt tttaagatt aggaacaaca aagaagtcag aaggagccaa 180
atctggactg taagggtgat acctaattgg ttcccatcaa aactcttaca aaatttctct 240
tttttgatga gaggaatgag tagaggcatt gtgggtgcaga agtctctagt gaagctttcc 300
caggcatttt tctgccgaag ctttggttaa ctttctcaaa acactcataa taagcacgtt 360
atcattcttt gttccttcag aaagtcaaca agcaaaatgt cttgagcatc ccagaaaact 420
gtttccatga tctttgctct tcactgtgtc gcttttgctt tgactgaatc acttctgcct 480
cttgggtggc attgccttaa ttgtgcttta ctatcttcag gattatactg ggaaaagaat 540
gctttangta tcctggggcc tacttgttga aaaatttcca ttgaaaagct ctgcttttgc 600
aagctgatcg gggaatgcaa gtgggttttt gggtacccca tcaagtngg aaagggtttac 660
tcaaacttta aattcctcaa gtcaaaaaat tggttn 696

```

<210> 88

<211> 660

<212> DNA

<213> Homo sapiens

<400> 88

```

attccgaaag aaacgtgtca ggcaagaagc gctagttcac gcctgtcatt ccaccgcttt 60
gggaggccaa ggcaggggga tcacttgccc cagaagtttg agaccagcct gggcaacata 120
gtgaggcccc tgtctctaca aaaaacttaa aatcaataaa caggtctcct tccttcctca 180
atagtcctgt tggtggctca cctctctgcc tctccagatg tgaggcagat ccacacgttt 240
agctattgag ataaggctgg gcgtgggtgg tcacacctgt cattccggcc tcagatctct 300
tgtgcccagg agttttaaga ctagcctggg cgacctggct ggcaacatgg cctccacaaa 360
nntaaataaa acattttaaa tatataaaca ttgagataat agcatcttga tgcctgtctt 420
cattttttgt cttctgtttt aaggactatt agagacaaac taaccaaga taattctccc 480

```

ctcccacgtg gctcgtgctg ggacgccggc accgtgagat ggcgcccgtg gccanataga 540  
agggtggcgt gtaaagcagg tggtcacccg tctctgact tttcgctgc tggtaggggt 600  
ggccccatgt ccatggntaa ggctcacacc tgggcccac tggtaggctgt gncatgggna 660

<210> 89

<211> 639

<212> DNA

<213> Homo sapiens

<400> 89

gtgccagagg gccacgacca ggtgtcctgc caagcccacg tgaatgagct gatcaaaacc 60  
atcatcatcc agcatgagaa catcttccca agccccaggg agctggaggg ccctgtctac 120  
agcagaggag gaagcatgga ggattactgt gatagccctc atggagagac tacctcggtt 180  
gaagactcaa cccaggatgt gaccgcagag caccacacga gcgatgacga atgtgagccc 240  
atcaggagcca ttgccaagtt tgactacgtg ggccggacag cccgagagct gtcctttaag 300  
aaggagcat ccctgtctgt ttaccagcgg gcttccgacg actggtggga aggccggcac 360  
aatggcatcg acggactcat ccccatcag tacatcgtgg tccaagacac cgaggacggt 420  
gtcgtggaga ggtccagccc caagtctgag attgaggtca tttctgagcc acctgaagaa 480  
aaggtgacag ccagagcggg ggccagctgt cccagtgggg gtcatgtagc cgatatttat 540  
cttgcaaaca tcancangta agctctgctt ttcattttct gctcccctga aatgacttgc 600  
ancaacccaa gcctcacccc tctgggccta aacccccaa 639

<210> 90

<211> 789

<212> DNA

<213> Homo sapiens

<400> 90

gtacgctttc ttagaaatgt gagcaaagag gaggcctta aatgtatgaa aacaactgaa 60



attgaaataa tatgatgcat aagaactaat aaagcatttt cttatttttt aaaaatttgt 120  
aggctgggtg cagtggctca tgcctgtagt cccagcactt tgggaggctg aggtaggagg 180  
atcactgtag cccaggagac cagcctgagc aacatagtgg gacaccatct ctacaaagaa 240  
ttaaaaatta gccaggcatg ggtgacatgt gcttgtggc ctagctattc gggaggctaa 300  
ggcatgagga ttgcttgaac tgcagtgagt gaggtgcat tgagccatgt tcatgccact 360  
gcattccagc ctgggcaaca gagcaagacc cagtctcaat gtttttttaa aaattttatt 420  
ttatctgtat ttgtatttta ttaatttttt ttctagacta gggtagtgat aattatagtt 480  
aactcttctt actaggtaac ttgtttttta tactctaaat ttcatactat attactcaaa 540  
attcagaatg taagccaaag agagataaag tatattaata aatgttaggt ttaaacttgt 600  
atgatacatt tccaaatagg tattatata ttttaaaata tataaatgtc catcttttct 660  
gtattgatgc ctatacaacc ataaccacag aagtactctc atactgtgaa agtcantgct 720  
aaattaggta ntcacttcct aaacacattt ctgaaaaaaa gggngtcctt ttagggcaag 780  
atgacctaa 789

<210> 91

<211> 570

<212> DNA

<213> Homo sapiens

<400> 91

gagtgttcgg gacgcgggcc tgcaggcgcc atggtcttcc tcaccgcgca gctctggctg 60  
cggaatcgcg tcaccgaccg ctactttcgg atccaggagg tgctgaagca cgccaggcac 120  
ttctggggaa ggaaaaatcg ctgctacagg ttggcggtca gaaccgtgat tcgagccttt 180  
gtgaaatgca ccaaagcccg atacctgaag aaaaagaaca tgaggaccgt aagcgtggac 240  
ccgggacacc cgccggccag cgcactcgcg gccctgcgt ttctgcgccg cgaccagct 300  
agtgtgcagc cgcccgcca cctcagccc ctctcttca taccttgctt cgaaactccg 360  
acaaattatg tcgccccgca ggcaaactgt gggacatccg ttctcccgcc ccgcccac 420  
ccccactgtc accccctgct ccagccccctc gccgggcca ctgcagagcc gccttgacac 480  
tctccctgcg tcgccagcca ccgccctant cgctgtgct ctcacccctc cggtggcttc 540

ccttcncttt ggnagctgaa gtcaacccag

570

<210> 92

<211> 640

<212> DNA

<213> Homo sapiens

<400> 92

```

ggctccgtga cctcctcggc ctcaggccct gcccaatctg ttgccaagat gttcagggca 60
gtggaggagg gcctgacgta caaattccat gcggcctgga gtcctgtgtt gcagctgctg 120
tgtgtcttct tcgaggcgtg tgggagacag gccaccctg tgatgaggaa gtgcctccag 180
tccctgtgtg acctgcgcct ctccctcat tccccaca cggcggctct tgaccaggca 240
gtgggggctg cggtgaccag tatgggacct gaggtggtgc tgcaggctgt gcctttggaa 300
attgatggct ctgaggagac tctggatttc ccacggagct ggctgctgcc tgtcatccga 360
gaccatgttc aggaaacgcg acttggtttt ttaccacct acttcttgcc cctggctaac 420
accctgaaga gcaaagccat ggacctggct caggcaggca gcacagtgga atctaagatc 480
tacgacacac tccagtggca gatgtggaca ctctgcctg ggttctgcac aaggcctaca 540
gatgtggcca tctccttcaa agggctggca cggacgctgg gcatggccat cagcgagcgt 600
ccaanacctg agggtcaccg tngtgccang ccctgcgcaa 640
    
```

<210> 93

<211> 687

<212> DNA

<213> Homo sapiens

<400> 93

```

tgatattttg accttctcct ttgaattatg aatgttctta atggcatcta gaatggttaa 60
tactttcgca gaagattgtc aatttatattt gccagatcc atcggaggaa taactgtggc 120
agcttttagcc ctaggaaatg ttatttctta aataataaga ctttaaagtc aaaattactc 180
    
```

cttaatccat gggctgcaga ctagatgtat cagcagacat gaaaacatta atcgttttat 240  
 acatctccat cagagttctt gggigactat gtgcattgtc aatgagcagt aatattttga 300  
 aaggcatctt ttctaagcaa taggtcttaa cagtggactt aaaatttcag taaacatgc 360  
 tgtaaacaga tgtgctgtca tccagacctt gttgttcccc ttatagcaca taggcagagt 420  
 agattaaaca taattcttac aggccctaga atttttagta tggtaaagt gcattgactt 480  
 caacttaaag tcaccagctg cattagcccc aaacaagaga gtcagactgt cctttgaagc 540  
 tttgtttcca tgcattgact tctctctagc tataaaagcc tcagatcgca tcttctcca 600  
 atggnaagct attttgtctg catttaaaaa tccgttgctt agtgtattag tccattttca 660  
 agctgctgga taaagacnta cccaagg 687

<210> 94

<211> 597

<212> DNA

<213> Homo sapiens

<400> 94

agctttgtgc gctctgttac tatggacaag tggaaggaca ttgagcttga gaagatgaaa 60  
 gctggtggga atgctaagtt ccgagagttc ctggagtctc aggaggatta cgatccttgc 120  
 tggtccttgc aggagaagta caacagcaga gccgcggccc tctttaggga taaggtggtc 180  
 gctctggccg aaggcagaga gtggtctctg gagtcacac ctgcccagaa ctggacccca 240  
 cctcagccca ggacgctgcc gtccatggtg caccgagtct ctggccagcc gcagagtgtg 300  
 accgcctcct cggacaaggc ttttgaagac tggctgaatg atgacctcg ctcctatcaa 360  
 ggggcccagg ggaatcgcta cgtgggggtt gggaacacgc caccgcctca gaagaaagaa 420  
 gatgacttcc tcaacaacgc catgtcctcc ctgtactcgg gctggagcag cttcaccact 480  
 ggagccagcc ggtttgcctc ggcaaccaan gagggcgcta caaagtttgg attcccaagc 540  
 gagtcanaan gcgtccgagc tgggccacag cctgaacgag aacgtcctca agcctgc 597

<210> 95

<211> 752

<212> DNA

<213> Homo sapiens

<400> 95

```

aacgttttgt tttaagttta ttttggcatt gagttaaata ttaacgcaa gattcagaag   60
taggtgacag acctagacta ttggttaaatt tattcagatt gttttaattt taaatatgtt  120
tcttaaacat ctgagcaact ttttgtttga tacagatgat gtctaccgta gaaaagcctc  180
agaaagacag tatcagagaa ggctggaaga tgaatgagac tgaacttcag cagtcaataa  240
agtcaatatg aatttttact attggtttca gtgcctttta aaatatactt ttcagatctc  300
ttgttctgac acagcttgtc ctttatcagc tgcacaatat tccaataact gtttttgcaa  360
agaattttta tagttctgtc tctgcttgag tacttcccaa gtcactgctg gacagcactt  420
gtgggaaaat tatttcctcc taaaacactc actcgatgaa tctagtccat gaaatatctc  480
ttaaacaatt caaggatcaa tcaggatgct tttcaagtga agcccgaatt gttttcggca  540
atctttgttt ttaggcaact aattataacc ttatttactt ttttgcagaa ttcaaattaa  600
attatggaca cattctctaa tgccagatca tttaaaccag ggataattat gcaggttgta  660
tttccgccag ctactaagac tataaacttt ttgccnaggg tgggtgggaa aattccntga  720
nttgaccta cggcaatttc ctcaatggcc aa                                   752

```

<210> 96

<211> 808

<212> DNA

<213> Homo sapiens

<400> 96

```

atgcaattac aaatccaata ccattganc ctttttggga cctatccctg gaattccctg   60
aacgctatca ctgcatagaa aaggggtttg tccctttgaa tcaaacagag tgcttgctca  120
ctgagatgct ggccaaattc acagagacag aggccctgga agggagaatc tacgcttggt  180
accagtgtaa cagtgagtg cgtgtggagg agggggcgta gtggggaaga ataattggaa  240
tatcagttta aggtgctgct ttgtcctctt tagtcaaaag taacactaat gatattgaat  300

```

ggtttctaaag catcttttaa agatcttttt ctcccathtt tctaaaaaca aaaaaacatg 360  
gacttgthtt aattatgtat taaaaaaca aacaaggctg ggcgtttgtg ctcacgcctg 420  
taatcccagc attttgggag gccaaaggcgg acagatcact tgaggtcagg agtttgagac 480  
cagcctgacc aacatggtga aaccctgtct ctactaaaaa taaaaaaatt agctgggcat 540  
agtgggcana tgcctgtaat ccagctact cgggaggctg aagcangaga atcggttgaa 600  
cccaggaagc ggaggggtgc aatgaagcca agatcgcgca ttgcactcca gcctgggcaa 660  
cagagcaaga ctccgtttca aacaacaaca acagcaacaa atggaacaan gacctaggag 720  
ttgattgacc tccctgaatt gcattangtt gtcaaccttg gtaagggatt ttaaaagttt 780  
gngggctcct gaaatggggg actctgaa 808

<210> 97

<211> 681

<212> DNA

<213> Homo sapiens

<400> 97

ggaaacatgc agcatgtagt aatttatgac agcttctttc acttagcatg aggttttcaa 60  
agttcattga tgtggtagca ttgtcagta ctctgtgcct ttttatggct gaataatatt 120  
ttatcatatg gatttaccac attttatcat tttatttate catcatcagt tgattgacat 180  
ttgagttgct tctacttttt gagtattatc aataattctg ttatgaacat tcttgtacaa 240  
ttttttggta gacatttate ttcatatttc ttggatatat acctaggagc agaattgctg 300  
cgtcagatgg taatgctgtt taaccttttc aggaactgtc agactgttct gaagtgggta 360  
cattatttta cattccaacc agcagtgtat gagaattcca gtttccccac atcctcatca 420  
acagttgtta ttgtctgtct tttttattat attcatctgt aatgtgaagt gtttatctca 480  
ttgtggthtt gatttacatt tccctgatgg ttgatgattt tcaacatctt ttcatatact 540  
tattaggcat tatgtatcct ctttggagaa tgtctgttca gatcctttac ctactttaga 600  
attggthttat ctttttaata ttganctgga atagthttta aaaaatatat ccnaanatac 660  
aagtctctta tcaagataat a 681

<210> 98

<211> 549

<212> DNA

<213> Homo sapiens

<400> 98

```

agctggccccg cttgaggcgt aggggggtggc gctctccgtt cggcggcgct cccatggcgc   60
acattaccat taaccagtac ctgcagcagg tgtacgaagc catcgacagc agagatggag   120
catcttgtgc agagttggtg tcttttaaac atcctcatgt tgcaaacca cgacttcaaa   180
tggcctctcc agaggagaag tgtcaacaag tcttgaacc cccttatgat gaaatgtttg   240
cagctcattt aagggtgact tatgcagtgg ggaatcatga cttcatagag gcatacaagt   300
gccagaccgt gttagtccaa tcattcttgc gagtgtttgc caataatgca gatcaacagt   360
tggtaaagaa aggaaaaagc aaagttgggg acatgttggg aaaggcagca gagttaatga   420
tgancgtttt cgggtctgt gccagcgaca cccgtgctgg tatagaggac tctaagaagt   480
ggggcatgct gtttctggtg aaccantgtt ttaaaatcta cttcaagatc ancaaactcc   540
atttatgtn                                     549
    
```

<210> 99

<211> 738

<212> DNA

<213> Homo sapiens

<400> 99

```

ctttatcaag gaaattagca caccaagtct gacagaagag tagattgtgt ttgtgcttac   60
ccttcttctc ctaaaattaa gtgtagctt tcaaacttgc ttttgaagtg ctaagaaccc   120
tgatgataaa tgatgaacaa agcctcctgt ttacattgga agcatcaaaa cagcaggact   180
gggccaatc acccattcct gttgatcatt agacattaac tggttgcca acttcaacca   240
catcaactac aaaatcctga agtgaaacaa agtctaagtt agttgacttt tctttgatta   300
gtctctagtg catttatcac tttctatgaa agaagcatct aatttagatg gcagttgatt   360
    
```

tgtgtcatgg gatttcttct gacaggaggc agagttatgt atgtgtttat ggcttctttg 420  
 cctttaaaag attaatgttg ggcaaatata aatcacaaga cctggatagg gggctgggaa 480  
 gatggagcag gagcttgcca gggatgatga ttgagacgta ttttagagga ttttcattgc 540  
 tagaaaaaac actgggaaga tgtggcagag gggatggggg gcaggagacag tgaagagaga 600  
 tggctttttc tccctaagca cagagaaagg acaggatggg gcacttgagc cagggaagt 660  
 ggctttctgg ctctgtttca gaagcaaaat gganattgaa attgggtaac ttcctgangc 720  
 ttctttcctg ncctgata 738

<210> 100

<211> 759

<212> DNA

<213> Homo sapiens

<400> 100

aatattttcc cctgtcttat tttctatcat ttcacatctt cttaaacaca tatattttta 60  
 aaagagggtt tgactcactg gtgaatttgt cttaaaatgg aaaaataaaa tcaaataata 120  
 gaattttgtt atgaatcttt ggggaaacac aattaggga tctaccttaa taggtaaacc 180  
 catgtaattt cttatttccg tctagttata ggaaaatact gagatacttg tgagatgttt 240  
 tctttttttt tttttccaac ttgtatacac gttgttctat aagtggttga ttgtttttta 300  
 ggaaaaaaaa attcagcatc tcaaattgtac cttaaatatt gcttctgatt tttgttggtt 360  
 tgctatcata gcgttaccta cctcacagag atgttttagg tcataagtat ttttcattta 420  
 attttttttc cctttcattt cctttttttc cctcctaagc tataaatata cagccttaaa 480  
 aaaaacactc agaaatttaa gtccaagaag cctgcttttc ttgatacctt tcaagtgtta 540  
 gattaataac atttttgtca ngtggttacc agaattggagg atacttgagc tgagttttgc 600  
 tagagtccaa gaatcatcta ttccaatttc tggggacaca tattttgtcc tggttaagag 660  
 agatatatna tgatgcctat ctgattccgg tgggtgggct gggctttgat gtatggtana 720  
 tgtgggcggg aatntgtgtg cgtgtgtgtg tgcattgtt 759

<210> 101

<211> 579

<212> DNA

<213> Homo sapiens

<400> 101

```

aaaaagagcc gagtgggaca aagcctgggg ctgggcgggg gccatggcgc tgccatcccg   60
aatcctgctt tggaaacttg tgcttctgca gagctctgct gttctcctgc actcagggtc  120
ctcgggtacc gccgctgctg gcagctccgt ggtgtccgag tccgcggtga gctgggaggc  180
gggcgccccg gcggtgctgc gctgccagag cccgcgcatg gtgtggaccc aggaccggct  240
gcacgaccgc cagcgcgtgc tccactggga cctgcgcggc cccgggggtg gccccgcgcg  300
gcgcctgctg gacttgtact cggcgggcga gcagcgcgtg tacgaggcgc gggaccgcgg  360
ccgcctggag ctctcggcct cggccttcga cgacggcaac ttctcgtgc tcaccgcgc  420
ggtggaggag acggacgcgg ggctgtacac ctgcaacctg caccatcact actgccacct  480
ctacgagagc ctggccgtcc gcctggaggt caccgacggc cccccgnca cccccgccta  540
ctgggacggc gagaangagg tgctggcggt ggcgcgcn   579

```

<210> 102

<211> 769

<212> DNA

<213> Homo sapiens

<400> 102

```

tttaaaatta tgaaaagtaa ggaaattctt atttaagcaa ggttattaat tggacattac   60
tgtatTTTTG gtacctattg tatctgagag tctagagaga gtaatagaat cataacatta  120
ctattctaaa atagtatcitt cattgtttaa accctattca cctccttttc ctattgcatt  180
tgactttttc atagataaat ctgaagttaa ttttttttta aataatcctt tctacatggg  240
agcagtgtat attaggaaat tttcaattac tttggacctg cacctttgca ttgtaggtca  300
gaacctacaa aaattccatc ttggaaaaca ttttagattt accttgtatt cacacacccc  360
tgcaaagtgg gtctttgcaa acaggaaagg taaaagattt atttttactg caaaatcatg  420

```



cctttatata ggattagtct gtggattatt tcaggcaaca atgagtagat ttttgaagga 480  
 aacttcataa cacagttttg gagccctatc ttctgtaaca catttccaac ctttggaat 540  
 aaccttgatt ttccaacttt taacctgata ccaacanaaa tggacaaaga taatatcaca 600  
 tggaattatt ctgaagagcc agctgctgag aagttccagg agctgtaaat tagacaaaag 660  
 catccattta tttgggagta agttacaata tggcntanct taaaaaatat ataatgattc 720  
 agggaggtat tttaatggaa ccttatgtgg caatttatgg gngaactaa 769

<210> 103

<211> 686

<212> DNA

<213> Homo sapiens

<400> 103

agttaagtaa atgtagtatt ggctaagtta ctgtaagtcc tcattctctg gtaggtcctg 60  
 taactetaat taggcatttg tacattttta gcagcaaaat tgcctcagca gagctcccag 120  
 ttttattccc agttgtggct gaaaagcaaa gccatggcat cagtatcctt gtgcaatcgg 180  
 aggttgctgg gctttcacca cctgtgttgt taaccttatt tcctggagga agaaacagat 240  
 gaaacaagtg cctaactccc tttatcaaac acagccaagg acagcctctt ttaacatgtg 300  
 acttcatact tgaggaaaag gagagttgac agctgtattt aaaaacccat ggagccgggt 360  
 gcggtggctc acgcctatga tcccagcact ttgggaggcc gaggcaggcg gatcacaagg 420  
 tcaggagatt gagaccctcc tggctaacac cgtgaaaccc cgtctctact aaaaatacaa 480  
 aaaattagcc gggcgtgggt gcgggtgcct gtacaggagg ctgaggcagg agaatggcgt 540  
 gaacccgcga ggcggagctt gcagtaagct gagatcgcg cactgccctc cagcctgggc 600  
 aacagagcaa gactccatct caaaagataa atagataaan taaaaccca tggaatggn 660  
 ttaagaaaat ggntctgggt acacca 686

<210> 104

<211> 817

<212> DNA

<213> Homo sapiens

<400> 104

```

gattaaatgt tctgagtaag tgagtttgta gacattttct tgtaagaaaa tgttccatgc 60
tttactctgt tttggacatt ttcttttgaa aaattttgag atagaaacct taatatcatt 120
tcatatattt acagcatata gttaatttga gtagagtcaa attaattctta ctttagaatt 180
tgattactaa gtattagcat ggataataat gcttcttttg cttaaagtga aaaattaggc 240
cgttttacta ggtgtacttt gtcttaatca tattcctatt tttttataca gctgtgcaac 300
catattgctt ctgggaaaaa atgtcaatat gtgggaaact gttcctttgc tcatagtcct 360
gaggaaagag aagtttggac ttacatgaag gagaatggga tacaagatat ggagcaattt 420
tacgaactat ggctcaagag tcaaaaaaat gaaaaaagtg aagacatagc cagtcagtca 480
aacaaggaaa atggaaaaca aattcacatg ccaacagatt atgctgaagt tacagtggac 540
tttcaactgt ggatgtgtgg gaaaaactgc aacagtgaga agcagtggca gggccacatc 600
tcctccgaga agcacaaga gaaggttttc cacaccgagg acgaccagta ctgctggcag 660
caccgcttcc caacaggcta nttcagtatt tgtgataggg atatgaatgg cacctgcca 720
gaagggaaca gctgtaaatt tgcacatggg aatgccgaac tcatgaatgg ggaagaanga 780
agagatgncc taaagatgaa agccaacaan gcacgaa 817

```

<210> 105

<211> 773

<212> DNA

<213> Homo sapiens

<400> 105

```

ctggtttcaa gcaccccaga gggagttgta tccttttgtg tgtgccctgt ggaattttca 60
tggcaacata agttgtattt cticcatgact cactgccata ggaagaccac ccaaaacata 120
ccctcttctg taacccaaat ctacagctgt gtccttattt tccttgtttt cagcatgtcc 180
aagtgaagcc attaagtagg taatatactg ttagacacag atcatgggtgc ttgggaaaac 240
aacacccaag cctcgtgatt aataagcact gttaattgtt aagctgctct tgctgggtgc 300

```

tgacctcacg gggtttgtgc tgtgacagct ctttcatgtt gatgaggtaa atgagtctct 360  
gccatgatgg ccgggagaag ccaggacaga gtatcagatc gtgtttcacc aggaaaacaa 420  
ggttgattta ctgtgttaca cgagggtgaa gtggaccag caccactgca ccccgctgctt 480  
tgattccctt gtatgctaaa tatgcaagca caaacagct ttaacacaat tttttaccta 540  
gaaaggagcc tggggctgca tccaagtaca ttaacatgt gaaaattgag ctgctttgaa 600  
cttgtatgtt ttgataact gcttggatg cttcctggan gatcacctgt aggcttttct 660  
ttccaaatcc taaatccctt tgattgaagt gccaagacaa gatagctcct cattgaataa 720  
ctccaagtcc canaantcct cctcaatca agaagtttga aaggggnaac aag 773

<210> 106

<211> 776

<212> DNA

<213> Homo sapiens

<400> 106

gaaagtaaat aaggaaatca gctctctaag gcaatgctat tctttttata ctctcaggat 60  
agaagatctt ggcgttgttg tagattgcct tcctgtgctc accaattggg aaaaacaata 120  
tttttcagaa aaaaaataag attaaaggag gtcaaattat ggcccatcca tttttttata 180  
acttgggtatt tatttttagtt tacaggaaga aaaacaatat atctcacttg gctgctgtgt 240  
tgacttggtg cctctagtaa agtcactact taaaagcaaa tttgaagagt aagtgctaata 300  
ctgaatcttg attcatTTTT ctttttcagc atccttgatt ttgtgctttg tgagtacata 360  
gtagattggg ctccatgaga catgcaaggt ttctgttttc aagaagctaa tagtacaatt 420  
aggaaaagaa tatgaaatga cttaaaggaca attataaaaag catctctaaa caaattacat 480  
gaaatatact tttgtgtaat agatcatgaa ggtaacaatt ttttaaaagg gaagggacca 540  
atgtgtgtgt gtgttttttg ggagggaag tatcatcttt tataagaagg gctcttagat 600  
gaaaacactt gaattttgta acaaaatgtc atttcagata tgttatagtt ggttttaact 660  
gggcttcaag cagtcattaa aaagggtgtg gtcaagaact atcatccaaa nacaggaaat 720  
tataaatgat ngggtgaggt aataccttta aangattaaa cctcaatgcc ggaaaa 776

<210> 107

<211> 794

<212> DNA

<213> Homo sapiens

<400> 107

```

aataagtagc ctccaggcat tcccttccac caagaggagc aattgttttt taaatagccc 60
tttggcgccc agtctattac taaaccatat gagtcatttt ttaatattac tgcattgtgag 120
ttaacatagt cttcccaaata taaagtttta gatgggcctt caaaattttt agggcatggt 180
tttctgcag gtttatatgg aaagtatggg gtccctgact tctcgcaaca gtggcctaca 240
ctgcctttca gttctgtacc taggcctcca aagcacttta gcctgtgggg cttgccagaa 300
ctcgggttcc agctcctgga atggacagtt cccctctggc tagggttgat ctaatgttcc 360
ctctgggtta ctggctgagt tctgccctgt gtggctttct gctgtgccag ggctgcactg 420
agttcaaata cagagtctca caatcattgt attcttccct cccaggagc acccattctc 480
tctttacacc aattgggcac tgccagggga tgaanangga tgatgttgac aattcaagac 540
tatttcttac cctcttcagt gcctgtttcc ttaatatgat aataaaccag gtactgcgat 600
cactcacctg attattggnt ctaagaagg ngctttttta atggaattgg tcagtttgat 660
aattctgtcc ggagggatga ctgctggagg atctantaag ccatcttgct ctgccttctt 720
ggaacacata aaaatcacag ttttgggcaa ctgtaagtca aagtgttga anttaattat 780
tcantttttc cttg
794

```

<210> 108

<211> 717

<212> DNA

<213> Homo sapiens

<400> 108

```

atctctttgc attattacaa gttgttggtta ttttagttc tatttatatg aaaaatgtac 60
tttttagccc acaaaaatag catagcagca gcttatcaaa atgtcccaga caagtttact 120

```

tcaacaaatt agtaacacct tcatgcttcc tgtggtggaa gaaatgcaga gtccacttcc 180  
 tcccagtga catctgagcc agatttctgc tccactcggt ccccttccc acctcttaca 240  
 gccatgaaat aatgtgagag tatttgtttc cctgcaaag ggaagagggt ccagagacaa 300  
 aagggaagtt agtattcact ggaagcctcc ctgtacaagc aacagtgtta ggacttttat 360  
 acacattttt acaattatta cagcagttct caattattga aacagagggt aggcatattcc 420  
 cctttttcag aagggaagaa tgagaattaa gtttaattcca aagtcacaca gctagtgaaga 480  
 gaaaaagcct ggacaggaac tcagactgta tgactccaaa ggctaagtgc attctataca 540  
 cacaggccgc cctcctggca gtgagagttc aagatctgtt ggagaaaact cagaccatgg 600  
 gtttcttgca acttctgctg ggngaacaat taaggtgncc gttccccctg ggggaagtgt 660  
 ttcaaagtgg aagcaaccac ccaaggggga aaaagtcctg gggcccttgg gngttta 717

<210> 109

<211> 836

<212> DNA

<213> Homo sapiens

<400> 109

tctctggaac agttgagaga caaatgcata agcatttttag aaagaccaa tgtgaagcca 60  
 tactccaaat attcaacatc actgcagtta tttttgagtt tatcaagatg tgattacagg 120  
 agagtcttac ttagtctctg cttttatgtt tccaaggtgt ttgtgcatgg actttcctct 180  
 tttccaatag ccaaacttgt ttggatgtga tccaagatgt accaaaaggt attgaaaatt 240  
 aatgtaaga gtagtcttct agcaatattg caccattccc aggcagtttc caacgtgcat 300  
 cagcatgtct gtctccagtg gaacaagata acttccagcc cctgaacccc tggggaaact 360  
 ctttccctct ttactgtatg ttgttgccac tgtaggagaa atctctctc tgcctgactc 420  
 tgcagctgct ttaccagaa cctcaggagg aactctgagt ccagagccag gctgagttca 480  
 gccaggcaag tctggccttg gggctgtata tatctgtctc agacatcgtc tgtgttttca 540  
 tatatttttt gactttttta aagatgacct agaccacaat agtatgttct atttttgttt 600  
 tgttgtgttg tgtttttcca ttacattgct taagtacagt atttctagga tagaaaattt 660  
 gctttcttgg tctgccttgg gaacatacct ancaattaca acattgattt tcataaaaaat 720

tgagttttaa gttccaactt gcaaataaac ttttggataa ccatcaattg ttanggggaa 780  
atgtgtccgg attaggaatt tcctaaggaa ataaccacnn aaatgaaggt ttaaaa 836

<210> 110

<211> 759

<212> DNA

<213> Homo sapiens

<400> 110

tgaacaagaa atcttttttc tttagctggg catggtggct tacgcctgta atcccagcac 60  
tttgggaggc taaggcagga gaatcgattg cgcctaggag ttgagacca gcctgggcaa 120  
tatactgaga cctcatctct acacaaaata caaaaatcag gtggttatgg tgggtgtgtgt 180  
ttataacccc agctacttgg gaggctgagg tgggagaatc acttgagccc aggagttgga 240  
ggctatagtg agtcatgatt gtgccactgc actccagcct gggtgacaga acaagacctc 300  
gtctcttaga agaagaatit ttgtctctaa tgctttgcta aaagaaaagc aatatctaat 360  
atcttttctt tgttcaaaga aaagcagtat ctaaaagtgc agagttttct gcattttcta 420  
aagggaactt gttgggaggt gctctctcct gatgcgctgt tcttgagtgc catccatgat 480  
cagggttagg tttggaacag agagggagga gaagacagag aggctctttt gggataagtg 540  
agcaagaggt gggatggatg aggaaatgag gttaaacgag acccgttctt gtaagagcaa 600  
ggagagtgcc tggcgtggct cctggttttc catggtgggt ggagggncg ggcaaccgct 660  
gatgccctgt tgggggaagg aacnggaggc cactctgcaa aagggggctc tcgcttcccc 720  
aatgtcctca tntcgaataa agcaaggcaa ntccagtta 759

<210> 111

<211> 508

<212> DNA

<213> Homo sapiens

<400> 111

atgaaaatca atatgaaatt atatgactgt ttaaaatggc ggcttcaagg cgtttcacgg 60  
 gtgtcccga caggcgtgga ggtggggcgc aggcgaggat gaagcttgag ttggccagga 120  
 gtcggaaaac gattgcaggc gggaccgcgt ccgtcggggc tgaggaaact tagcgtggca 180  
 gaccctaaac tgggataact ttagggatat ggccttcttt tcccagttgc ctcaaactta 240  
 gagcagcgtc gtctttagcc gaagattcat tttcccagca ttttccttct ccaggcggag 300  
 tagttggaga cagagggcaa gccagaaact gaccttccca tctcctcatt cccttccatc 360  
 aagaactttt catcgttctt tccccaccct ggtttgtaaa tggatatttg cttcataaaa 420  
 acgtttgtcc acagggtccc tgctccanca gttcgtcca gcantatagg aagttaccag 480  
 aaaanaaatt tttttttatt gaccttgg 508

<210> 112

<211> 879

<212> DNA

<213> Homo sapiens

<400> 112

acctaaacat ggagacagcg ggcgctgcaa ctgggcagcc ggcctctggg ctggaggctc 60  
 cgggggtccac gaatgaccgg cttttcctgg ttaaagggtg aattttcctt ggtaccgttg 120  
 ctgcagcggg aatgctagct ggatttatta caacattatc attggctaaa aagaaaagcc 180  
 ctgaatggtt caataaggga agtatggcca cggctgcatt accggaaagc gggctctccc 240  
 ttgccttgcg agctctgggc tggggctccc tgtatgcatg gtgtggggtt ggtgtgatta 300  
 gcttcgcagt ctggaaagct ttaggagttc acagtatgaa cgactttcga agtaaaatgc 360  
 aatcaatatt tccaacaatt cccaagaact ccgaatcggc tgttgagtgg gaggaacat 420  
 tgaaatccaa atgagatgag catggatgaa ttcaaaaatg cttgttacag aaaggggttg 480  
 ctctggagac accatgacag caaaaggact gggactgatt tctcccagga acatgggcag 540  
 attgctgact gaaccagtgc actggatagc attcagcctc atcacaggaa agtatgtgtg 600  
 tgcgtgctgg gggaaggtaa agttttccca cagttaagaa gactatttaa aaatagtaat 660  
 tacaggaata acttcttat gttggggggg acccatagga aatgattctg tttgtaacag 720  
 ttgaagcaaa tttcatacta aaaaaagttt ataataaaag tatgataaga aaatatttat 780

aaaacaganc ccccaatagc aatatactgc aatgtgtcca aattaaangg agtttcaaaa 840  
agccnttcct tgtcaaatat attgacaaga accttggaa 879

<210> 113

<211> 649

<212> DNA

<213> Homo sapiens

<400> 113

gatgaaccag tatggatttg cttttctaag cctcctgttg gttactaatc tcacttggca 60  
cattataact aaaggaatcc cctcaattca aaagcataga tggatacaaa tgtcagaccg 120  
tgggtttaat ttgttttagaa cacatggcat ttcttcacaa ggtaacctgc tgtattttatt 180  
tattttcttt tggttaaata taatttccaa actttgttgt caggcagcgt ctaaggttac 240  
gttaccacag actgacagtt ggtatatgta ccagccaatc cttcattaa atgtatacag 300  
atntagttaa gtagcattaa ataggattct tagaagtatg tcctcataga acttttaata 360  
cttaaggctt tgtaaaaact atccatgaag ggaaagctcc tcagcataac tgctcaggga 420  
aatagggcta aataactgaa cattaaataa ttggttaaag gtgctgttag tcgagcctca 480  
atgcttgcta caaggatgta tgtacaagga ctgactttaa taatttgcatt tatattgtcc 540  
caaccagtag tttatttttt gccacggaga tgtanaagat attacaagct actggatgca 600  
ctggtcagat taacntattt cattaaagaa gttgggagaa caaaatang 649

<210> 114

<211> 709

<212> DNA

<213> Homo sapiens

<400> 114

attgttttta aaggaactaa ggtctttgta gctgcatgtc agctagtcatt cagttacatt 60  
ttagagacag gatttttgtt tataacttaaa cttcagacaa attggcagca tataattgtt 120



cctttataca tgagataata tgatgatata actgatgttt aagaacattc ttattgtaag 180  
 acagtttctg ttttgccaca gcaacccaaa ggacagttaa gatatgtacc atatgacctt 240  
 tttgcatata taccaatgtg aatttacttt tacattaatc atttcccca aagagttcac 300  
 cctatgtttt gacagaacag ttggcatttc aactgataag gtatttctag ttttaaata 360  
 atttggtgtt tgtattttgt tttgaatatt tttaaagact aattttaaga atgcactttc 420  
 tataaagtat atgcatctta gaaaaccagg aactggggag aaagtttttt aaatgatgat 480  
 tgaagataga ttttattgga gaaatgcttt actgatgtgt attttagtgc attttaaaaa 540  
 cctaagtatc tggtagtgtt cccctttagt tgagcatgag attaaagttt agaacttttt 600  
 aagacaattc cttttttgtg ggtgtgtact cattaatgcc tggtcgtcct ttgcaattta 660  
 gataaatgat ataacattaa actcaanggg ggttganttg cantaggga 709

<210> 115

<211> 734

<212> DNA

<213> Homo sapiens

<400> 115

attgagtttc tcgctacttc tgccactcat cacacttgct tcccagagct ttgctgggtg 60  
 tgctgaagtc tccagagaaa gtggggaata tgggtgccta gagacttcta ggggggtgtt 120  
 tcagccccta gagagtagag aagtgtgaga aggggttggt cccgaatat tctgtagttt 180  
 tggggaagaa gcaatgggga cagtggagtt ggttgcctta agagaggcta tgggtcccaag 240  
 agatgggact tggagagtct ctacttgcac tcttgcttaa gcccttaata ttctgcacc 300  
 cctccttgca agactagtct cttttgaggt ggttcttggc tagcttttga gaggctgcag 360  
 tggctgtgtg cccaggctta agtcctagct ttctcccccac tctttacctc ctaggaaccg 420  
 ggcccatcct gggggaggca gggaggagct cttttttata gtccacatgt aggctttgtg 480  
 tataggctct gctgcttcc tccggccctg gcccttccctg gtgttggccg gtggccctgg 540  
 cttcagcaag actcaggatg cagagtaaag ggggcaaggc gttctcctac agaagactgg 600  
 catccctttt tactgagccc aagcctggca cagaggangc tggagttagg aagcaagaaa 660  
 acgaggtgac ccagtccttg atcctgagaa accttgtgaa tctggnccaa tgcaagaaaa 720

ccgctaatagn ccaa

734

<210> 116

<211> 677

<212> DNA

<213> Homo sapiens

<400> 116

```

aagccccggcc tggcggcggc ggtggcggta gctgccgtgg cggcctctgc gcatgctccg   60
tcgcctgccc gccctggccg ctgcgcgccc gcccgcccga cggagacgca gtcccagcta  120
tctgacttca tgtgaaagat ggctaatagca gaagtgagtg tcccagtggg ggatgtgggt  180
gtggtaccta ctgaaggaaa tgaaggggag aatcctgaag acactaaaac ccaagtgatt  240
ttgcagttac agcctgtgca acaagggtatt tatgaagctg ggtcggagaa caacacggca  300
gttgtagcag tagaaactca cacgatacac aaaattgaag aagggtattga tacaggcact  360
atagaagcaa atgaggatat ggaaattgct taccataa cttgtgggga gagcaaagcc  420
atcctcctct ggaagaagtt tgtatgtcca ggaataaacg tgaagtgtgt caagttcaat  480
gatcagttga tcagcccca gcaactttgtt catctggctg gcaagtccac tctgaaggac  540
tggaagaga gctattcgtc tgggtgggat catgctcaag aaaatgatgg actccggaca  600
gattgatttt tancaacatg acaaaagttt gctccaatac ctgcaaaanc accaaatttg  660
atcttccgat naacaat                                     677
    
```

<210> 117

<211> 659

<212> DNA

<213> Homo sapiens

<400> 117

```

aaagccttgg cactagcggc gtccgggcgc ggagtgcgca gggcaaggct ctgcgtctctg   60
ggccagcgct cggccatgcg atccgccgcg cggaggggac gcgccgcgcc cgccgccagg  120
    
```

gagctgaggc acgctcggca catgagttcc tgtttcatta ctgtgggcag catcttcacg 180  
 cagcacgctg gcaccagaag gacaaaaggt agtagatcga cgctgaacag tttcaacaca 240  
 ggggaaaggg gaagaattaa ggaacctcta tgattctgat ttctgaaagc agccacagtg 300  
 agcgctctgc aatgagtcce tttgcctggg gcatgcaatg cagagacaca aacggacaca 360  
 catgggcgca cgcgcgca cacaatgct ctgactttgc aagctgaagg ctgtgattgt 420  
 gtggactgcc tcgtgtccct cctccttttc actgaatang gaggttcatg ctgataccac 480  
 agggccgaca cctgcgttct gcgttcacac ctgcgtggat ttctgccacc ctgactccct 540  
 tcttgtctgc atccaggtgg aagcgtctgg aangttcatt acacgacccc gcagttccac 600  
 cccganggaa cgggggcctg ctacgggcga ngcgtctgcc catgctccgg ggaaggcgt 659

<210> 118

<211> 698

<212> DNA

<213> Homo sapiens

<400> 118

ttaaaatgct attatgaaac agattcattc attcattcat gttgccacc tgggtcccat 60  
 agtcacgga gttttccact cttgacgaac gaatacttgc cctattttcc aagctaagtc 120  
 ttgaatacct tgtaatgttt tacttcttgt ggcatcctgc actttgtgta aaatcaggag 180  
 tggggagtgc caataaataat ttgattgact aattgacagc ttgagtcaag gttctggaag 240  
 agaataaata caagggaaaag gcattccctt ttccatttag accatatttt gcctaagcca 300  
 aatggacgat ttacagctaa tcattgcgtc ttaaccaggg acagctggag cttactgctt 360  
 gcctcctgcc tagtcgtctt tattecttct ataaaggcag aaaacagaag ggctctgcac 420  
 acagcagtca cagacgctca tcaaagacaa accactgaca tggaaactga acaagaaaag 480  
 gcttcctggt tcaaggctgg cttttgggag ccatgttcaa gcatgcccta agtagcacag 540  
 tcagcagcct ttttccttca ctctttangg gctgggggtg aggaacaaga ttccctcaat 600  
 tttccaacaa ataacctaat tcagtgaat aaaaaaangg ggggtggggc aatggtgcaa 660  
 tcagtcantc atatgccaag ttgtanccat gttaagta 698

<210> 119

<211> 697

<212> DNA

<213> Homo sapiens

<400> 119

```

tgtaaaatgt ggacaataat aataatgcta acagtaaaaa ctacctcata ggattgatgt    60
gaggattaaa tgagctatga aaacctctta gaaggtagct gttagctagt actcagctca    120
gtgagtatta actgttttgt tattaagacg tgtgtgtctc tgccatttgt atttaacacg    180
tgtccttgtg cctggcttac ctccctgtta tactgtaacc tccgtaagga caggcatagt    240
gcccccttct tccttatctc ttactgctt gtattagtcc atcttgcgct gctacaaagg    300
tacacctgaa gctaggtaat ttataaagac atgagattta attggcttat ggttctgcag    360
gctgtgcagg aagcatattg ctggcatctg cttctgggtga agacctcagg aagttgcctt    420
atggcagaag gcacagggga agcaggcagt cacatgggtga gagagaagga gcaatagaga    480
gaaacaggag gttctttcaa ccaaccaaga tctcacgtga gctcattacc acggggagtt    540
caccaagaca aggatgaagg attcgcccct atgacccaat acctcccact aaggcccaac    600
tccaacactg gggatnecat ttcaacacaa ggatttggan ggganaaaca tccgaacaat    660
atcactggct tttccgggct gtaaaacaaa ttigggg                                697

```

<210> 120

<211> 634

<212> DNA

<213> Homo sapiens

<400> 120

```

tcagataaag cccaaactcc tatccattct tcccagggtg gatggggcac cccgtgccct    60
ccagcctcct cattcccact ttctcacta tgttggcttt cgtttaggct tctgaaccct    120
ccaggctccc tctggccaca gacttgccac ctggctagct cctctgcct acccctagcc    180
tctgagagcc tttctgcctc ctctgatgag gcccaatccc ctagtaaatg attttattta    240

```

cacagtagac aatagaggct agatgcatat ttttttctt aaaatattgg actactttta 300  
 ttttcttaca taataatgat atttatttaa agtgcttttag gatagttcct ggatatcatt 360  
 atgtacagat taaagtttaa aaattaaact tctgaaccat gagatagatt ggttcccatt 420  
 caagtaatcc attcacattt tacctactgt aatgactggg aatgtgctgt aacatacttt 480  
 gcanccctgg cctcccttcc tgtctcctaa aanaatggag ctgggtgttt caagtttgn 540  
 aggatggctt ctgttgaaa tttgccctt taagtttaga agactgaccc ccatcttacn 600  
 gctctctttc gaagctagtc taatgnaca agta 634

<210> 121

<211> 740

<212> DNA

<213> Homo sapiens

<400> 121

ccctgggacc tcatcaggcc acggattgtg tgaatcagca gaaaatagga ctttcctaag 60  
 caaaacagga aggaaagaaa ggatggagtg tgaacagat gaacaaaaac agggctctga 120  
 tgagaacatg tcagaatgtg aaaccagcag tgtgtgtagc agcagtgaca ctgggctctt 180  
 taccaatgat gaagggcgac aaggatgatga cgaacagagt gattggttct atgaaggaga 240  
 atgtgtccca ggattcactg tccctaattct tctgcccaag tgggctcctg atcattgttc 300  
 tgaagtagaa agaatggatt ctggattgga taaattttca gattccacat tccttttacc 360  
 ttctcggcca gctcaaagag ggtaccatac tcgcttgaat cgtctacctg gagctgcagc 420  
 tcgatgcctc agaaaggggc gaagaaggct ggttgggaag gagaccagca taaacacttt 480  
 ggggactgag aggataagcc atatcattag tgaccctcgg cagaaagatt tctggttacc 540  
 atcagctggg aaaagagaac gaaatcagtt caatcccctg tctccccttt actccctgga 600  
 tgttcttgcc gatgcttctc accgaaggtg ttcaccaagc aactgctct gccanacaag 660  
 gcaaatgtac actgggggac caccatgttc acgtgtcatc aagaggaagc ggaaancaat 720  
 gggcacagna tctttgtcaa 740

<210> 122

<211> 584

<212> DNA

<213> Homo sapiens

<400> 122

```

ggccgagggga aacacaaccc caagcagcct ggagtaagtg gtcccgaggc agctcaagac   60
agtttggttt tattcatttc agagagacag gaattgcagg gaaaatcatg aatcagtgcc   120
tggaaggtgt aagttccatt ggcagaaagg gtgggacctg tggaaggggg gttagaaggc   180
acaggtagtt gagggattct gtaggtggca gctggttgag agtggtgaat ctttgtctaa   240
agtttgagg aggtaggaag gaatgctgaa ggaagggggg ctgttatctg ccacttcatt   300
ccatcccagc caaaaaacag acctgtttct cgagatttta tgaattctaa ggcgtaactt   360
tacctttgcc ttgcgtggcc ttaggtcttg tttgtaattt ggtatcttgt tgccacaagg   420
agtctgtttt tccagtcaga taatgtctgt tttacatga atgtgcgtca gttgctgcat   480
gtaaactcct aaagggagan ggtataangg agacctgtct caactcccat cctgtcatac   540
agaggcactc aattttcang gttttttggg ggttcccttg gcaa                       584
    
```

<210> 123

<211> 730

<212> DNA

<213> Homo sapiens

<400> 123

```

accaacgcct actccccggt gcagcaggga gtcacatca aaaggaagag tggggagatc   60
ccatgccctt tggccgtgga ggcgtttgcc gtcacctga gctacatctg tagatacgat   120
gacaaataca gcaagtattt catttctcat aaaccaaaaca agacctggca gcaggtgttc   180
tggttcgcca tcagcatcgc catcaacaat gcctacatcc tgtacaaaat gtcagacgcc   240
taccacgtgg agaggtacag ccgggcgcag ttggagaga gactcgtcag agagctgctg   300
ggcttgagg atgcctctcc gaccactga tgctgggggc gcaggactcg gtcaaggag   360
gggcaaggagg aggaggagag cctgccgttc caacttgccc atcagagacc cggacacggc   420
    
```

ctggtgtgtg gcttgctgcc tggganggat gcacagggcc tctggaggga caggatggac 480  
 ctggtcagag gacggttgct gtcctcattt gcattccaag aagagcatgt cctccctcga 540  
 gaaacagtgc cgccggtgtg atgagcactt acaccacgt tctcaagggc aaattctctc 600  
 atgacatccg tggagcttgc gangcaacgt ggactgggtga ctgtgaagga aggccccntt 660  
 gtaaaatgag ctggagcacg ctctaagaga gatgctgctt cctaaagatn tacagcaatc 720  
 tgggacntgg 730

<210> 124

<211> 752

<212> DNA

<213> Homo sapiens

<400> 124

aatgctgctc tggtttcttg cgcgcttggc gctacaggga gtgcgggcgg cgactccttg 60  
 cgcaagtcag cttgcctggg aaagggtttt gtggctgaaa gcgactgggtt ccttgccaca 120  
 aaggctccgc tggcgtttgc ggttcagcgg ccgtccctga gtaagatagc cacttttctc 180  
 cgacgctgcc aatagccttc tccaagtgtc gcaggctttc atcgctttgc aggagccatg 240  
 cctcggggac ggaagagtcg gcgccgccgg aacgcaaagg cagctgaaga gaatcgcaac 300  
 aatcgcaaga gccaggcctc agaggcttca gagaccccgga tggcggttc ttagaccccg 360  
 agcacacccg aagaatacct gagcggcccg gaggaagaca caagcaccct ggagaaggnc 420  
 tccagtaccc cttcanaagc ttcgagcact ggcctantgc aaaagccggt taccggagca 480  
 attttcaagg caacaagaaa agtctcctaa tgtccatatt aagccctcat cttcatcatg 540  
 ggcaacaacg caaaggaggg cctggtgtgg aaagtgtggt ggaagttagg gatgcaacct 600  
 gggangcaac acaacatctt tggagattcg aanaaggtcg ttacagaaga atttgtgccc 660  
 aaaagggtat ctganttata agccagtgcc ccgcaacaat ccaatggagt ataagttctt 720  
 ctgggggcct ccaacaanac ntgggaatcc aa 752

<210> 125

<211> 796

<212> DNA

<213> Homo sapiens

<400> 125

```
cctactatgt aattctgtaa ctttttttcc tgaatgttta ggtctatttt ggcatgcagg 60
gattaagaaa atagctatct gagcatatat tttatagttc actaatgaac cctactttga 120
ccctgtgggt taatgaatga aaagtatctg ctattatggg gtggtttcat cttatcaatt 180
acatattttt gttttgaaat ttgtcacctt tgtcttcacc attcttttct cttggacaga 240
ctgttagccc cttaactcat gtacttgcct tgacttaagt taccagtctg tccaagagaa 300
aagaattaca ttcattggcaa atgccccag tcaggcacia cataccatat acataatatt 360
cttgatgagc ttaaagtagc cacacagcac tcagggcagc ctccactaac tgattggnaa 420
taagcctatt tgccatatct ccctgaaact ttctattaac aaagncacia aacgcttaaa 480
caaagaaaaa ttagataata tcaatagccc atcttctaac acattgccta gctcaatact 540
ttcaatacat attttccaaa ctaaaaatta aaatctcaac tctttaagag aagtttcgta 600
antttggagt ataaagagan ttcctgggc aatataagtt ttaaagcca atataattgg 660
aaacttacia tgacatttca agtgggtttt ggcaatggtt ttcccaaagt anggggaacc 720
ttaccaacg gaanggtaca caagtggatt ttccgggggg gttaaaacia gattgaacia 780
ttttttaant tttaaa 796
```

<210> 126

<211> 644

<212> DNA

<213> Homo sapiens

<400> 126

```
aagaccgtcc cggatggcct cggggactgc cagtgtgtgg aggtgagctc cgggattgcc 60
ggcattcccg cttctgctgg ttgcttcatt ctgcaggctg cggccgctcag ccctcgctcg 120
cattggtggc gctgaggtgc cggggcagca agtgacatgt cgtcgggcct ccgcgccgct 180
gacttcccc gctggaagcg ccacatctcg gagcaactga ggcgccggga ccggctgcag 240
```



agacaggcgt tcgaggagat catcctgcag tataacaaat tgctggaaaa gtcagatcctt 300  
 cattcagtgt tggcccagaa actacaggct gaaaagcatg acgtaccaaa caggcacgag 360  
 ataagtcccg gacatgatgg cacatggaat gacaatcagc tacaagaaat ggcccaactg 420  
 aggattaagc accaagagga actgactgaa ttacacaaga aacgtgggga gttagctcaa 480  
 ctggtgattg acctgaataa ccaaatgcan cggaaggaca gggagatgca gaaagagctt 540  
 gcagaagcag caaaggaacc tctaccaant cgaacaggat gatgacattg aggtcaatgt 600  
 ggatgaaact tctgatnaca cagaanagac ctctcctgtg cgaa 644

<210> 127

<211> 505

<212> DNA

<213> Homo sapiens

<400> 127

aaaaaaaaag taaagggaaa cagacatgaa cactaggtga catggagtgt taggggcgct 60  
 atggtagaag tctgcagaga gtgcaatggg cgtccaaatg aggaagtgat cacttgcaca 120  
 agagtgggag gcttggctgg aaaggcttct ctgaatagga tgacatttga tctgtgtttt 180  
 gaagggcatc gttggcaagg taagtaatcc aattaaagga ggttgcctca gctaaagcac 240  
 agtatgctca aaggtgcgga tcatttgaaa atttgagttc aggtgcagta ggggtaaggt 300  
 aagtatccaa cagaatttcc tacaatgatg gaaatgttct atattgtcac tgtccaatac 360  
 ggtagcctct agccacattt ggccaatata actgaagaat tgaatattaa ctttcattta 420  
 attctagcta atttaaattt aaatagtttc atcagttagt ggctaccata ttgaacantg 480  
 caagnttaga gataaacaga ggnca 505

<210> 128

<211> 772

<212> DNA

<213> Homo sapiens

<400> 128

```

gaaaaatcac aaagaattgc atggcaagag tgcctgtctt tcacagcttg aactgttgca 60
ggaactttct tttttttttt tcttttgtga tgcactccag cctgggagac agagcgagac 120
tgtctccaaa acaaacaac aaacaaacaa acaaaaaaac cctgtagctt gggatcagcc 180
ttctcttctg ttgtttttct ttaaaaaata aaaattaaaa ataggcttca agtgatcctc 240
ccgccatgac ctccaaaact gctgggattg taggtgtgag cactgcaccc agccgtatgt 300
ttttttctac ataaaaaaca gcacaggatt atcttccaaa gctaacaaat atgttcaa at 360
aaccacaacc ccaccctgc tccttggagg acaacgtgat cactgtattc agctctgtca 420
agaatgggcc aggttcttca taaattcccc aagtttccaa gtagttcttt aanagcagtg 480
tgaaaacaag actaatggga cccttcctgg ttgaaggga tgtangccaa ttccggcttg 540
gtttaaggta tttccctttc caattcaatc cccaatttc cccggggaag ggggtggtta 600
aaccctaaaag ttgcaaatta agggagaata atttgggtgg aactggcaaa aagttcccc 660
ctcaaattgt tccnggccaa nttaaaataa gtttaaaagg gttgattcaa gtggattctc 720
ccaggcaant tttcaaattc ggggaatggg aaaaagcccc ccaatggtta ac 772

```

<210> 129

<211> 678

<212> DNA

<213> Homo sapiens

<400> 129

```

agagcacaga agaggagaa gtggctgctc tgcgcctcac ggccagatcc caggtgagtg 60
agtgtgatt attggaatta caccttgttt cttagagtac agatgcactc ctttctttgt 120
gatgtggagt ttctttatcc actaaagccc atctgcagag ctgagttcta aatctaagag 180
actagtcagg agactaatgg actcagaaga aaatgttttc tacttataac actggatgga 240
tttcttccct atttagtggt tattgtccct caacagatag gtaagcagca tttccctttc 300
ttagcctcct atgctcattt ctgtgcttgg taatgtgaga aactatttta aatataatgt 360
ggtacatacc tcttaaaact tgtttctcta gaggaacag catgtatgtg accttaagt 420
gcaatctaag aaagcactta aatgctgaag tgattgtaaa aataataaat actcacatag 480

```

ttcaaagaaa tactggaaaa ggaaagccta tgaaggcgta atttaaagag ttacagttag 540  
aatccaaccc tctgagatga tgaaagctaa ggtatgatca tgtctgcaac ttacttttat 600  
attgttgggc cctctctccc aaaaggnaaa tatgacaaat attacnaatg tttgggctgg 660  
gantacaagc atgagcca 678

<210> 130

<211> 666

<212> DNA

<213> Homo sapiens

<400> 130

gggcaaaccc ttgaaaaat attctaaatg aaaatgacat agtattcata gtggaaaaag 60  
tgcctttaga aaaggaagaa acaagtcata ttgaagaact tcaatctgaa gaaactgcc 120  
tatctgattt ctctactggc gaaaatgttg gaccacttgc tttaccagtt gggaaggcaa 180  
ggcagttaat tggactttac accatggctc acaatcctaa tatgacccat ttgaagatta 240  
atctgcctgt tactgccctt cccccctttt gggtaagatg tgacagttca gatcctgaag 300  
gtacttggtt gctaggagct gagcttatca caacaacaa cagcattaca ggaattgtct 360  
tatatgtggt cagttgtaaa gctgataaaa attattctgt aaatcttgaa aacctaaaa 420  
atttacacaa gaaaagacat cacttgtcta ctgtaacatc caaaggcttt gccagtatg 480  
agctctttta gtcctctgcc ttggatgata caatcacagc atcacaact gcgatcgctt 540  
tggaatattt cctggagtcc tgggggatga aattcttcaa atccctcaa tctcttcaaa 600  
ctggcaaatc cggaatattt aaaggtggga atcaaggag aancccaaaa ggggcccttt 660  
tggnan 666

<210> 131

<211> 753

<212> DNA

<213> Homo sapiens

<400> 131

```

gctcagcttc tctcaccgcc tctgggtgtc tttgctttcc tgaccacagc ctctctgccc 60
aagcctgtgt cctctccttc cgttctgggc tcttcatct cacgtttccc cagcctccaa 120
gctcttgaag agccgtgtca cactgagagc ttccttgacc tggcttcatt tccctctgac 180
agtgaacctc agtgtgctgg gttgaccaat gccaaagcctc tttttaaac aaagtagttc 240
accatggggtt gggatgatgt caacaagcag tattcatgtt aaaaagcaat gagggactcc 300
ttccctgggtg cacaattttc ttcacttggt atctctaaac tgttttcaaa ttggaagact 360
gggaagcatt gctacagccc cagccagtct cagccactgc tcagcccagt ggtggaaagc 420
tgagcacaca gcgggtgctt actgccccca ctgcccgtct gctctccagt agatcaaggg 480
acctcagaca gggatctgag aagtggcagg ttccaataaa ctgatcaaca gaatgaagtc 540
actctgggaa gccatgaggt gactttacaa gccaagcat gtaaataac acacagagga 600
taatataat tctttttttt tttttttttt gagacagagt ctcgctctgt caagccaaag 660
ctggactgca gtggcgcaat cacnggccat tgcaacctcc aactcctggg gttcaaggca 720
ntcctcccaa ccttaagnct ccccagtag ccc 753

```

<210> 132

<211> 772

<212> DNA

<213> Homo sapiens

<400> 132

```

gagtaaaggt gacttttggt atgttttaga agagactggt ggcattttgc ctctgcccta 60
gagatttggt gaactttgaa cttagaagag ttgatttagg gtatctggca gaagaaattt 120
ctaagcagca aagcattcaa gaggtgattt ggatactggt aaaggcattt agttttataa 180
gggaagcaga gcataaaaagt ttggaaaatt tgcagcatta ctatgcgata gacaagaaaa 240
accatttttc tggggagaga ttcaagccag ctgcggaaat ttgtgtaagt agcaaggagc 300
ctaagttag tccccaagac catggggaag atgtctccag accatgtcag agaccttcac 360
cacagcccct cctatcacag gccagaagg aaaaagtggg tttgtgggcc tgggtccaggg 420
tccccttgct gtgtgcaacc tagggatgtg gcacctgtg tcccagctgc tgcttcagct 480

```

gtggctgaaa ggggccaatg tacagctcag gttgtggcct cagaggggtg aagccccaag 540  
 ctttggcagc gtccacatgg tgttgagcct gcaggtgcac agaagtcaaa gaattgaggt 600  
 ttgggaacct ctacctagat ttcagatgta tggaaatgtc tagatgcccc ggcaaaagtt 660  
 tgctatgggg tggggccctc atagagaacc tctgctaggg cagtgtggaa agggaaatgt 720  
 ggggtggagc ccccacacag agtcctact gggcactggc tatnnactgt na 772

<210> 133

<211> 606

<212> DNA

<213> Homo sapiens

<400> 133

tttaaggcgc cgggtttccg gggctcctgg ccccgcttat tccgcggggg tcggcggggt 60  
 cggcctgggc gcccgcgccg ccgctgcgct ttgtccgctg ggcacactgc ttctgggagg 120  
 ggcgggcaga catggtggcg gccgccccc cctcctcggc cctagcatgc cgcggccgcc 180  
 tcgcggctac ccggtttgcc ggtcccgcgc ggcagccccg ggggtggcgat ggggtcgcgc 240  
 cgaggcagcg gaggttctgc gggcgactgg aggttggcag tgggcgggag aaagaggaag 300  
 gcaggcgcgg ctgggcctcg gcctctggcg ccgcggtacc ctttgtctcg gcagcctgac 360  
 ggccccgccg ggctctccgg agaggggaac gggcggcgag ggtggcgggt cctgggcgcc 420  
 ctgtgctgcg gggccgagag gcgctcgggt cgcggcgggg ccggccggac cagacagggt 480  
 taatggaaga gcctggccag tcccgcgcgg ggcccccgca gcgacagcct tggccgnggg 540  
 gactggagtc ctgaggggga gaagcctgcc gttctgaang ctcgggactt ctgncccaaa 600  
 gacttc 606

<210> 134

<211> 843

<212> DNA

<213> Homo sapiens

<400> 134

ttcataat	ttt aaccagttta	gccagagttt	ttagtactag	tattaacttt	tgaattatgt	60
ttaaggtc	ttt agactttaca	gcatgttttag	tttattttca	tttcttatta	gtatttttca	120
gtactta	ata gtctcttgcc	cccacctcca	acaagaactt	tcctctctgt	tcaacatcag	180
aaacattt	ttc cttttggcat	gtgcttttcta	gttccccaaa	cagtataagc	aaattggaaa	240
gttttag	ctgt cattcttgga	aggttacaga	tcacactagc	agcctgagta	atccaagagg	300
ttttaagt	at catagcattt	agtttaaa	gt gaaatttgct	ctgacagggc	tggcagacca	360
ataggaaa	aaa gaaatatttg	tgcttggaga	agtgcata	tgt tagagaccaa	aagtataact	420
gatggct	gga agtgatttca	gtctaaaaaa	acaaatcatt	aagagagtgc	ataggggtaa	480
aatacac	agt tcatatttta	aagagttctca	aaatgaacca	gcaactaagg	ttagcattac	540
atagta	atta gttgtggtgt	tcaggcttta	actcactcag	taccagacag	tatagttaaa	600
ctgtcgc	tga aaaaacattg	ctactttacat	gatattctct	agtttaaa	acc tatagcagta	660
atttttg	acc ttaaaaaacc	aaggtattat	gacagattat	ataaatgttg	aaccagtaac	720
agacaaa	caa ttattttaaaa	ggacgtgcta	atggctcaag	tttattggcc	ctaggggtta	780
tttaagc	ccg ntcacaagnt	cccttaacca	tttgngngta	tgaaatgaag	catggcttga	840
tag						843

<210> 135

<211> 860

<212> DNA

<213> Homo sapiens

<400> 135

aataccat	ta tttaaattgc	ctttgggatt	agcccccttc	ctttccttat	aaacacaggt	60
agcagga	act gtgctgctca	tttttctgtt	agtagtgtgt	acttcatgcc	aggacattgg	120
gtatttt	ctt taaagtgaat	atagaatctc	aagatatacg	tagcttcac	attgacattt	180
cccagag	cca atagtcagcg	gatcggctct	gtgaacacca	ctgccagctc	ctgtgtctac	240
atctcag	agg agcccatgtg	ctctgcttct	ctccaccaga	gcaagctctg	ctgggcgtgc	300
ttctggg	aag aaaacaattt	tctttaagaa	gaagatgaat	gtccaggaat	ttaaagaaag	360

gatcgattgc cttttattta tgagtttcta gctcttgaag ttattcacat gcagttcagt 420  
 tagtcaagta aaatTTTTTT tcaaataaaa gtatccaagt ggtgcagtta ttattatata 480  
 cctctttaat aattttgctt tttatttttc ccctcttctt tttctgttac ttgaatttta 540  
 tttcctgtaa tttatagtgt gtagctgtaa attgaaatat ttataactgt gaaattgact 600  
 taattcatat gttgtctcat aactttattt tttttaaatg catattcagg gaaatatatt 660  
 actcatattt acaattgggc gatataggaa ctccaattta gatttaattt gcaactctta 720  
 gcatttttta atccttgata aaattttccc ttttgggtgt aaacttcaaa gaaaattgnc 780  
 atctcctctg acatttagga gcagcatctt tctaccctt gngaataaat cattgaagga 840  
 acaggtaaaa ttaantttaa 860

<210> 136

<211> 716

<212> DNA

<213> Homo sapiens

<400> 136

cacttgggct cgcgtcctcg gccgcgccgc gcggcaccgc ggcccagcag ccgggaggcg 60  
 gcagctctcc tctacgcccg tcccctcagg gcggctgtgg atgttgccag tattgtcgat 120  
 gcttcagagc gacgtttgcc ctgcgacaca ggcgggccgg ctctcctctg tctttatttt 180  
 cctggaggcc gacaggagcg gggcccagat tcggtggtgg tcgtgagcgt ggggggcact 240  
 caggcccgga cgggctctca ggtcgccgac ggcgggcggt ggaggccgcg ctggctgtcc 300  
 caggctctcg ttagcttttag ggagccgac tccgggcggc cccacagagg acgcccgcga 360  
 ttcgatggcg atgatgcccg ttttaaatgg tgtccctgca gccgggtgga tggatggatc 420  
 gtacaccttg ccttttgaga gccgggacct tacgcccgac tgcgtgttat ttctgcggaa 480  
 taagaacgca acctttggag gtgaagacga ctgtcggctg gattgaattg gaatcgtgtt 540  
 tgtgatgatg cgtttatttc tggaaatacg cggctctcgc tgcttttgct ttttgcggc 600  
 agaggtttgg gttcttctct aacggtcagg ataaaggcct gtagggcgac gctgcgcgag 660  
 cgagaagctc gncccgcggn tggcccgggc cgccccctt ttaggtgtgg ntggaa 716

<210> 137

<211> 868

<212> DNA

<213> Homo sapiens

<400> 137

```

ccaactgttg atgcatcttg aaaatcattc ctcaagtta ttatcacttc cattcccat 60
gtcagtggca tagctaatta tttagaaggc aggtgtctct aggttaattat agttagttct 120
gtatgcaatt atcctttctg aaatgtgtgt tgtatgccgt aaaaatacct gttacgttat 180
agaatataac aaatagctaa cacaatagtt aatacttagt tgatgctgac tatatataat 240
tctctagttt attatcataa taatacacct cacatcattg aagtctttta cagtttacca 300
agttctttca ttcacgggtg ttcatttggg tatcccaaca acattttcaa ggcaaacgtg 360
ttaccatcct tagtttgaag aggaggaacc tgaaacttag gaagactaaa taacttgtaa 420
aagatcacag aagtgatatc taatagagac gagcttcaaa ttcaggttta ttgaactcag 480
aatcaatgct cctgccccct acctctcagg agtgataatg gtaaagattg ggggactgta 540
ggccaaatag gtcctctgac ctcttttata attgtcagct tatctaacgt gaatgactta 600
gataggcctt gcagattgag tccttgggag atttcctgcc tctgtctagt attataccca 660
gccaatttg tacctgctga ccttccaagt tcctgtgggc atttgagttt ctgaccttg 720
cctttgaata agcctgccat ttcctatagc atatgngcat tttttgttcc tggaactttc 780
tactacttta aatttgggtc ggatacttat cagcaaaca atcttttaga ctggcntgga 840
ngtctattat gggaaaaggg gngaaatt 868

```

<210> 138

<211> 773

<212> DNA

<213> Homo sapiens

<400> 138

```

ttctaagca gcctgaactc caaagtcctat gggcaggtct gtactgatgt agcttctgtg 60

```



gtaaatcctg catccttccg ttgggatgga gggtcctcac gtagaggttg gggcctgcaa 120  
 aggggcacag ggaagctgca gggacctctg tgcctaccct ccatgctgag tccattctca 180  
 tagccagggt gatgtgttta cagcctagat atgattcctc actaccctgt tccatgggtc 240  
 acccccaccc ctggggctac gtatggcagc tgaacactgg aagtcctggc cagggcctgt 300  
 ggagtcctgt ggggcctggt tctctctggc tctgctctgc tctcttgtct tcattgcacc 360  
 tgcagcctcg ctgattcctt tgccgttctg cagatgttga atcccttcag tgtcagggtc 420  
 gtgtgcctgt ggttctttct ctctgcctgg gacatcttgt ctccagctgt ctgtagggct 480  
 ctttctctca cctccttcag gtctccact ctgtgagcct tctctacca ttctgtccaa 540  
 aatagcagcc ctagctctac ccctttgttg cattctgtcc ttatccggga tggcattcat 600  
 tgctacctga caccatcctg catagctact tgtctgttga tttgttgtct gactcctcaa 660  
 ttagaactaa agtgctgtgc aggggtgggag tggagtgtac ccatcgncag cccctgggca 720  
 agcacctgct cactgnctgg ctcaaagtca agtnccgaaa agtcttcac tta 773

<210> 139

<211> 710

<212> DNA

<213> Homo sapiens

<400> 139

ggtttccttg cccgtacttt taacttacct tattttcccc aaaacgggtg ctggcggtga 60  
 gactcccggg agcatgtcca ggttccccgg ccttaggggtc ttcccaggca cttgttctgc 120  
 ttgtcccttg ctttccccca cctgtgaggc ccagcttcgg catcgtagcg ggtggttctg 180  
 ggccgggttg cgcatacagg tccccagtg cctgtgacca ggcccgcccg ccccatctta 240  
 cagcaccact gccgggcgtg tgggcagata ttctgtggaa agtgttcttc caagtactcc 300  
 accatcccca agtttggcat cgagaaggag gtgcgcgtgt gtgagccctg ctacgagcag 360  
 ctgaacaggt gagtccccgc cccccatttg ggctgcaggt ggggcaggct ctccaggctg 420  
 ggttttctgt cctctcttgg catggtgcct gaggcctgca gaccccagag gaccctcaca 480  
 gcacagcagc tggaagggtca agggaaaccc aggggtggccg catgccctcg gaccctgccc 540  
 cacactaggg cagggtgggtg tgagagacag ggccgcccgg ctccaggac cgaggctgcc 600

cgacaaacct gttgcttggg tttgggtttg ggtttggttg catttcaact ttcggaataa 660  
aacttacaga aaagttgcaa gagtancaca gagaaacttc ggggccnngg 710

<210> 140

<211> 790

<212> DNA

<213> Homo sapiens

<400> 140

ctagaggcag gcagagggaa gagaaagggt ctgttgtttt tctctcctgt ttctcgctcc 60  
ctctctgctg atcacaaagc tgctgaccgg gtcagaaagt cctgatggaa atccaccagc 120  
gctgggcagg cccctcctcc tccagggagc ttgtccttgc ctaatttttc ttctgcctga 180  
tgagaacaaa aaagagagag agaagaaaag aaaaaccaca aacttccttt gaaaaccagc 240  
ttgtagtcag ggcccggagc gcatgccata gactcggcga ctcaggaatc ctgaagactc 300  
tctgagcgac ctggagcacc ttggctgtgt ccctgcctgc cttcacctc ctccagtgcc 360  
cccagtactg ggcgtagatc cggaagtggc cacaaccag cctggaccgt cgcttataaa 420  
gctgtgtaaa cctgtataag ctcaggcggt gacagctgga aggcagctgg cactggcagc 480  
ccccttcatt gcacctatct ccccatctc attgccacgg ctgaacctc cttctcaatc 540  
ttggaacagc acccccttct ttaaggtaaa aactttatit taatcatctt cttcacctct 600  
tctcccacc ttctctatit cctctccagc tttggggagc tgacacctgc tgnccctnca 660  
cctttggtct gcaagtctgg attgcttaaa ggagctaagt caggagagac atgtaaaggg 720  
gatgtgctt ggtccttctc ctttaatgaa agcccgaac ctttcccctt ttccttgnga 780  
gcaagtnnc 790

<210> 141

<211> 814

<212> DNA

<213> Homo sapiens

<400> 141

```

tttttttagat gaagtttcac tcttggtgcc caggctagag tgcaatggca caatctcagc 60
tcaactgcaac ctctgcctcc cgggttccag cgattctctt gctttagctt cccaagcagc 120
tgagattaca ggcatgagcc accatgcccc actaattttg tatttttggc agagacaggg 180
tttcaccatg ttggccaggc tgatcatgaa ctccttacct cagatgatcc acccactcga 240
cttcccaaag tgctgggatt acaggcgtaa gccactgtgc ccagcccatg aaactattta 300
aacaacatgt gattacttgg ccacttttct attcaaaaat atggtttatt agtcctgatt 360
atgtgccctt cttggcagac agaattgatac tgtgtacttc tgctgaaaga aatagaaact 420
ctcttccatt ttctagataa gagagtccta aaacagaatt tccaaaaact ccagtttagtg 480
gaggtaactt aaaatcctct ttaagaagga taattatctt taaaggttga ttcccaccct 540
ccctccccag ttacttaagg aactaagtga gtacatctcc agttgcccat gaaagcataa 600
gtttgttttc ctacagctgag gcaagtggta gagtatacag gataacgaag taacatgtaa 660
aaggcaggac gcacataaag gtgacatggc tattggttca cctggagaaa ccacatgatt 720
gggacctgaa ggttactgac tgctacaggg gctgattgtg aacacganga accccatgtg 780
tgtgganctg tanggtgaga gccccccatt tttta 814

```

<210> 142

<211> 727

<212> DNA

<213> Homo sapiens

<400> 142

```

agctgagagc ccaatcgcat caggggagca cggcccagca gcaggagctc caggctggct 60
ggacacctgg gtccccacgc agactgtgag tagagggagc tggaccacag tgggacaagg 120
acacctccag acaggttgcc agggccccac atggaggagg caggtgggcc catggcccgg 180
gccaaaggccc aagtggtaag tgccacattg acatggcggc agtggccccc caccaggaa 240
gagatcaaac atggttttca caaggtgtcc ctggtgtcag gggcccagat ggaagccccg 300
cagaaggaga tgtttgagtt cagccgtcga gaggaagtgg aagtcaatgg ctttgcaaca 360
caggaagaag agactgtgaa ttgccagggc cctcgggata cagctggctc caagaacttc 420

```

cagagccatg gacctatctt ttccaagaag tacataccac ctcccaagga gaaaaggcct 480  
 gaggggaggc tgaaggaggc tgtggaccag agtgatggca gccgccaagc tcccaggact 540  
 gagcccccat gtgtgggagc tatggccagg actgagcttt tggttccct gctgggcccc 600  
 gagagccaag tccccacca ggtgtaggtc tcaccagtgg tagcttccgg agcctnnagg 660  
 aataccgagt gacacgcact gtgcggacca ccacatggtn ggaggtatgt tgaccggcgg 720  
 ataacaa 727

<210> 143

<211> 661

<212> DNA

<213> Homo sapiens

<400> 143

gttacggcca ccaactgctgt gtataaggac cactggcgta cggaggcttc tgcctctccc 60  
 actgaccaca gtggctacgg cacggggccac tcccccgag gcgccctccc cgcccaccac 120  
 ggcggtgtgc ttggacaccg aggccccaac acccaggctg gtcagcacag ctacctcccg 180  
 gccaaagagcc ctccccaggc cggccaccac ccaggagcct gacatccctg agaggagcac 240  
 cctgcccttg gggaccactg cccctggacc cacagaggctg gctcagaccc caactccaga 300  
 gaccttcctg accacaatcc gggatgagcc agaggttccg gtgagtgggg ggcccagtgg 360  
 agacttcgag ctgccagaag aagagaccac acaaccagac atagccaatg aggtggtagc 420  
 tgtgggaggg gctgcggcca aggcacatc tccacctggg acactgcca agggtgcccc 480  
 cccgggcctt ggctncttg acaatgccat cgactcgggc agctcagctg ctcagctgcc 540  
 tcagaagagt atcctggagc ggaaggaggt gctcgtagct gtgattgtgg cggggtgggtg 600  
 ggcgccctnc ttgctgnctt ttggtcacac tgntcatcta tcgtatgaag aaaaaggatg 660  
 a 661

<210> 144

<211> 775

<212> DNA

<213> Homo sapiens

<400> 144

```

agcattagtt tttgtttttt atctgacagg tagctatgga tattctgagg gagaagccag   60
gattaataca cttttttttt ttaagttgct gaattgtagt ggctctcctt tctagcattt  120
ttgtcactat tgagccctct tagtttatgc tagacgtgtt tttcttattg gttgatattt  180
taaattatta aagccatctt ctgaataagc ttatttcgca ctttgtacct agtttctcca  240
tcagaaggat ctattgctat accattgtat acattttctc attggtcttc gggttacttt  300
cagagtgtaa agactcctta tgccacaaaa ttaagcttag atttccccca aatcaaatac  360
tataaatcag attccttagt ctagccacaa ttgacatata ttggagtgga taaatctttg  420
ttgctggcat tgttctgtgc atcataactt gtttagtggc atgtcatcac tgtcttctac  480
tctctagatg ccattagtat actcttcaca gttaggacaa ccaaaagtgt ctccagatat  540
tgccaaatgt ctctgatgg gcaaagtcta tcccagttgc gaaccattat tgtaaattaa  600
acttggtttc aaatttgagc ttatttcctt agctctggga acttgggcaa gttacttccc  660
ttcgagcctc aatggcctca ttgtaaaat gacattaata cctactttta gctgtgggaa  720
atgagtacca tgattatnch agcagttgga tgggctggta catganagtc aaagg      775

```

<210> 145

<211> 670

<212> DNA

<213> Homo sapiens

<400> 145

```

atattctatt ctttttttcc ctcccgaag aggggggtctc actctgttgc ctagtctgga   60
gtgcagtggg gcgatcatgg ctactgtag ccatcatagc tgacttgaga catcgacctc  120
cctggctcaa gtaatcttcc cacttcagtc tcctgaatag ccgggaccac atgagccacc  180
aagcctgtct aactttttta ttttttgag agatggggtc tccctatgtt gctcaggctt  240
gtctgaaact cctggcctca agcaatcctc ctgcctcggt ctcccaaagt gttgagatta  300
cagatgtgag ccaacatgcc caaccatgtt ctgttcttat atgaatccag gtcaaaaaga  360

```

ttaagaacct aggattatca tagacatccc ttctactttg aatattcttc taagtttgtg 420  
 attatatgct atgtataatc ttagacaatc ttctaaacaa tgattgaaaa gaattataat 480  
 gataggcaca tgaaaaagca atgccttggc ccggcacagt ggcccacacc tgtaatccca 540  
 gcactttggg agaccgaggt aggcagatcg cttgagccca ggaatgtgag gccagtgtga 600  
 aacctgggca tggcaagaca ccatctntac aaaaagtcaa aaattggcca ggcggtggngg 660  
 cncatgcttg 670

<210> 146

<211> 841

<212> DNA

<213> Homo sapiens

<400> 146

caagttatgc cctgacctgg aaattcccca gagttgctaa aagaactgaa tgggggatac 60  
 tgtacataag agcacttaag caacttaaaa tgtcacatgt aggacatat gcgtgtcatg 120  
 tgaatagcag ctgcattttg aagttgcaat aagtgtgagg aaaatgtgct tgttagctca 180  
 gctctagaca gatccatgga tagaaagaca tagacatgga tcccatcca gctaagtatt 240  
 tgcaatccgc aggtgaagcc tggaaacca gagaaatgga cctgttccat ccgtgacaga 300  
 agcgctccca ggacctaaat taaagggatg ttagaatgtt ttgagaatct tggcagggcc 360  
 attaggtagt gtttgtagct tttggatgct tttggtggag ggaaaatgag atgggctcac 420  
 ttgggaggtc tgcctgcagt ttccatccaa atttctaate aacgttgttg ttttatcatc 480  
 catttccgga atcattaccc cttaaaatgt gaggaacacg actctccttt tcttcaactc 540  
 cccatctttt ccaaataaccg ctgcgagttt ttgttgccaa cagcttttcc caatgtgcgt 600  
 gtacttacca acgtccagac tctcctcctc catcgccag ccttgcttgg tctagctatt 660  
 attcaaaggg gaacatgcgt gagatatac tttggttttg ccatctaag gattccaccc 720  
 cccaaagtnt ctgactttgc acttaggctc atctgcanga ccccnagggt ggcttccctt 780  
 cccttccgtg gctggcttaa aggggttaat tgaatccatt ctcttttctt tttccgggnt 840  
 t 841

<210> 147

<211> 764

<212> DNA

<213> Homo sapiens

<400> 147

```

ccccgtcata ggacttgtga cttactacca tcatacatat ttgattcaat tattatttat   60
tgcttaaatt gttatgatca tttattataa atcatgtatt acggctaatt aacatacata   120
tgctcagtca tttacttgat tagttattag cctcaattat attatTTTTT aatatatatt   180
tttatttgac aaatagaaag tatatagatt ggtacaatat gatgtttgga aataagcata   240
tattgtggaa tgactaaatc aagctaagta acttatgcag taccttacct gcttatcttt   300
tgttgtgata agaacacttg aaatctattc tactgtctta gaaatttaaa aatgggcaaa   360
ggacttgaat agacatttct tcaaaaaaaaa atgcaaatga ccaacaggta tatgaaaagg   420
tgctcaacat cactaattat cagagaaatg caaatcaaaa ccacaatgat atatcaccta   480
acacctgtta agatgtctat tagaaaaaca aaatgtaaca agtgttgata aggatatgga   540
gaaatagaaa tctttgtgtg ccttgtacac tgttgcaaga gcattagtag aactactttg   600
gaaaactctt tgnaattatc tactaaagat gaatatatgc ctactatatg acccagtggg   660
tctactttga agtgatcagg caacagaagt acatgcatac atgccccaaa gacatatccn   720
gaaatggtat tagacntctg gggtcaggtg cacatgtagg gagg                                     764

```

<210> 148

<211> 873

<212> DNA

<213> Homo sapiens

<400> 148

```

aataataaaa ttatgtctaa tgaaattcca aattaaggca aaataaacia cagaagaatg   60
acagcaaacc aaactagtgt actggttatc actatcaata attaacagag gtctggaagt   120
ttgaaatgct acaagtttta actgtatata gttgataata ttgctttctt taggaatcaa   180

```

ctgaaaacat actaaaatta attggtatga ctaagagagc agaaataaga ctaaaaaataa 240  
 aaacacaatg gatttcttct atgtaaagag cactcagaga ctatgatgaa aatattacat 300  
 accaatgaca gtagaagtag aaaaaaacac caaaataata gtgtgaaaag ttttaattgga 360  
 attcttaaca agaacatgta agattttcat gactaaattt tatataaata aaaacttgta 420  
 taaataagtt gtgacacaat tttctgaatg agaaaagaga gatgaaatat tgtctttcta 480  
 tttgcatata gatttactat caatctgaaa gtcttaactg aatctttctt ggatcgtcac 540  
 aaaaatatac aaaaaaaact catcttaaaa taaaaatcag ctaagaacta gtggaacagc 600  
 aagtttagta attttcctac caaattttta tgtcatttta aagccctact aaatatttta 660  
 atattttata tattgctata atagaacaaa ttgtatatag catgcttcct gaattggata 720  
 gattttaata tcatgagagt agatagatat actaacagaa ataaattcat ttactnataa 780  
 tgcttggcat ataaaaacca tactttgggg ggatagaata ggagcatgaa aatttgggct 840  
 aatncatttc cttctaaatt actggaaaat ggn 873

<210> 149

<211> 850

<212> DNA

<213> Homo sapiens

<400> 149

aacaatgctc attgaagctg caaagggtgg ccataactaat gtagtttctt atctgttgga 60  
 ttatccaaat aatgttctgt cagttccac cacagatgtg tctcagctcc ctccaccttc 120  
 tcaagatcag tctcaggtgc cacgtgtgcc aacgcataca cttgccatgg ttgtacctcc 180  
 ccaggaacct gacagaactt cacaggagaa ctctcctgcc cttttaggag tgcaaaaagg 240  
 tacatccaag cagaagtcca gttccctcca ggtagcagat caggacctac tgccatcttt 300  
 tcaccatac cagccttttg agtgcatagt agaggagact gaaggcaagc tgaatgaact 360  
 gggacaaaga attagtgcta ttgaaaaagc acagcttaag tcaactggagt taattcaagg 420  
 tgaacctctg aacaaagata agatagaaga acttaaaaag aacagagaag agcaagtcca 480  
 gaagaagaag aaaatattga aagaactgca gaaagtggaa aggagttgc agatgaaaac 540  
 acagcagcaa ttaccaaaag aatacttgga aaccaaaggc cagaaagaca cagtgtctct 600



acaccaacag tgctctcata gaggagtctt cccagaaggg gaaggagatg gtagtctccc 660  
 agaggatcac ttttcagagt tacctcaggt tgacacaatc ttatttaaag ataatgatgt 720  
 tgatgatgag caacagtctt caccatcggc agaacagatt gattttggcc cagtccagcc 780  
 tttatcatct tccacagngt aactttttcc agtgacttag gntctaattg gacaaantct 840  
 ttttgacttt 850

<210> 150

<211> 739

<212> DNA

<213> Homo sapiens

<400> 150

ggaaaaaaag ttaaggatac agttgaccgt tcgataatgt agcccactgt tgaccagaag 60  
 ccctaccac aacataaaca ggcaataaca catattttgt atgtgtatta tatagtatat 120  
 tcttaacaat aaagtaaact agagaaaaga acatgtacca agaaaatcat aaggaagaga 180  
 aaacacattt acagtactgt actgtattta ttggtaccat acatttatgt tgctgtttac 240  
 aagatgaagc atctgtctga aatggccagc agctacagct gtacctatct actgtacata 300  
 tcaagcaagt cgctttattc ttataatgtc tatgacttct ttctttgaaa gcgcttccat 360  
 catcactgtt ggcacttcat atgggtctca tgggtgtaag gtttacggca ttgcactaga 420  
 cacaatgaaa actacacaag agggccgggc acggtggctc acgcctgtaa tcccagcact 480  
 ttgggaggcc gaggcgggcg gatcatgagg tcaggagatt gagaccatcc tggctaacac 540  
 agtgaaaccc tgtctctatt aaaaataaaa aaattagcca ggcatggtgg cacgtgcctg 600  
 taatcccagc taatcgggag gctgaggcag gagaatcgct tttcccaga aggcgtaggt 660  
 tgcagtgagc cgagatcggt ccactgcact ccagcctgga tgatagaggg agactctgtc 720  
 gcaaaaaaaaa aaannngaa 739

<210> 151

<211> 783

<212> DNA

<213> Homo sapiens

<400> 151

```

gaanactcac agataaagtt atagttatTT cagggttctg aaaagacgca gaacatgaag 60
ggactcagaa gtctggcagc aacaaccttg gctcttttcc tgggtgtttgt tttcctggga 120
aactccagct gcgctccgca gagactgttg gagagaagga actggactcc tcaagctatg 180
ctctacctga aaggggcaca gggtcgccgc ttcctctccg accagagccg gagaaaggac 240
ctctccgacc ggccactgcc ggaaagacga agcccaaata cccaactact aactattccg 300
gaggcagcaa ccatcttact ggcgtccctt cagaaatcac cagaagatga agaaaaaac 360
tttgatcaaa ccagattcct ggaagacagt ctgcttaact ggtgaaaata tactggatta 420
tgtttaatta tggttctatt ctctttgaaa acatgaacca tgtgaataaa acctttggac 480
ccttttattc catttgtaat ctaagaaca cacacagata gttttattct ttcagaaaca 540
gaatatatat aggatgctta gctgagaaca tcctcttctt tcattgcttc aggtcctgtt 600
tagatgacca aaaatgtttt cagatcacct tgtgtcttac tcttgagttt cttagaatat 660
ttataattat aaggctgaag actaaagtgn tctttccttt taactatagc cagtacctgg 720
cttgatctta ntggggnttt tttttttca ttttggtacc cacttgcat tttggtttcac 780
tta 783

```

<210> 152

<211> 777

<212> DNA

<213> Homo sapiens

<400> 152

```

ctgcacgtcg cggacaacac ctctgtcttc ttcacgtcgg acaacggcgc tgccctcatt 60
tccgcccccg aacaagggtg cagcaacggc ccttttctgt gtgggaagca gaccacgttt 120
gaaggaggga tgaggagacc tgcccccgca tgggtggccag ggcacgtcac tgcaggccag 180
gtgagccacc agctgggcag catcatggac ctcttcacca ccagcctggc ccttgcgggc 240
ctgacgccgc ccagcgacag ggccattgat ggcctcaacc tcctccccac cctcctgcag 300

```

ggccggctga tggacaggcc tatcttctat taccgtggcg acacgctgat ggcggccacc 360  
 ctcgggcagc acaaggctca cttctggacc tggaccaact cctgggagaa cttcagacag 420  
 ggcatgtatt tctgccctgg gcagaacgtt tcaggggtca caactcaca tctggaagac 480  
 cacacgaagc tgcccctgat cttccacctg ggacgggacc caggggagag gttccccctc 540  
 agctttgcca ggcgcgagta ccaggaggcc ctcagcagga tcacctcgtt cgtccagcag 600  
 caccaggagg ccttgggtccc cgcgcagccc cagctcaacg tgtgcaactg ggcgggtcatg 660  
 aactgggcac cttccggctt gtgaaaagtt anggaagtgt ctgacacctt ccggaaatnc 720  
 attcccaaga agtgcctctg gtcccactaa cacctgggca aactcaggcc angccta 777

<210> 153

<211> 691

<212> DNA

<213> Homo sapiens

<400> 153

tctacatttt tgaaagacaa gaattaagtt tgattgagaa agatgttttt aaaactttga 60  
 aactcataat tgctctgttt ttgctgttgt tagtggcata agaagggact ggctgtgtta 120  
 ttctgcatat tgcagttctt gtcaatgacc tggtaagtct ttccttaccc tagtgaagtg 180  
 ttaaaattgc ctgagatgtg acgagcattt tgtttgggac ctgtgaagcc ctagcatttc 240  
 gtctggtgtt ttggagccag acaggccctg cagggtcaga ggaggggagg tctgcgatga 300  
 gtctgttgac acttgacagc gtggctcagt ggtactgttc gggagaagta tggggtgctg 360  
 tgctcgtaga gttacatagt gatattgtct gcttttttct aatgtgagaa agagaaataa 420  
 taagaaaagt aggtgatgcc atgtgagtac ataaaagtga gaccaaata cagggtgagt 480  
 ccaagggaag atgagtttac ctgcattctc cactctattg ctggataaat acaacgtgga 540  
 atttatcctg atgttgactc tgtggccctg tgatatctgg agatgtcttc tgaattggca 600  
 gngattaaat acttcttaag ttactggttg agcatccaaa tcccaaatagc ttcaggatcc 660  
 caaaaactttt tttttttttt tttgaggcnn a 691

<210> 154

<211> 740

<212> DNA

<213> Homo sapiens

<400> 154

```

tttcagaata ctgtataaaa ttaaatagaa tattgtaata gtttaagggtt ttgcatatat 60
tgggttaaatt atttctgaaa agcaaaatta tttcaagttt tcaaataatct tgacatggaa 120
cactgccttt gctaggagtc atttctagaa attacttaaa ataggagaca agcatcaatc 180
atagggattt cagctttaga actattggaa caaatctagg ttagacaacc agcttatatt 240
attaagcaag attacatata ataatcatct ttttttaaag gagagacttt tgcaaatatt 300
atacagcaat caaaaggctt tagcttagtg tatcatcctt attagaaacc aagatgttgc 360
attttatttc agtgctttct gtagtcatag ctaactcttt tacctcagca atttcaatca 420
aaaagcttct ctatcattct atacataaaa tgcagacaca ttagcagtca acattatgaa 480
tgcctttaca ggtaaacaaa caaaatcact ttattactgg attttataac caattcccat 540
tcttttttgt gactattcag gagaatactg ggttgaccct aaccaaggat gcaaattgga 600
tgctatcaag gtattctgta atatggaaac tggggaaaca tgcataagtg ccaatccttt 660
gaatgggtcca cggaaacact ggtggacaga ntctagtgtc gagaagaaac cccgtttggn 720
ttgganagtc catgggatgg 740

```

<210> 155

<211> 761

<212> DNA

<213> Homo sapiens

<400> 155

```

gaggatggca ggaggagtgc ttgcatgttg agcagtcctg agagtagctt gacaccacct 60
ctctcaacca acctgcatct agaaagtga tgggatgcat tggcaagcct ggaaaaccat 120
gtgaaaactg aacctgcaga tatgaatgaa agctgcaaac agtcagggtc cagcagcctt 180
gttaatggaa agtccccaat tcgaagcctc atgcacaggt cggcaaggat tggaggagat 240

```

ggcaacaata aagatgatga cccaaatgaa gactggtgtg ctgtctgcca aaacggagga 300  
gatctcttgt gctgcgaaaa atgtccaaag gtctttcatc taacttgtca tgttccaaca 360  
ctacttagct ttccaaggta ccagtgaat aattgatttt tgggtttgat tttcataagc 420  
taaaaataaa taacagaaga atgttcaggg cagatggcct tctaaccagt gcatagtatt 480  
tctataaaac agggagcctg ttattctttt ggtatttagct tccagagaaa ctaacaataa 540  
aatatctaag atctaagtag tacattaatg ttaaagagta gatttcatct cctggccttt 600  
agtttatatt cagtataagg aaaatagata aaactctaaa ttaatagggg gctaaggta 660  
caaacctgc agtctggttc taattctgta gtaagcttga caattcacta attatcaggg 720  
atcagttttt gcatctacaa gtggtanggt ttggnntanc a 761

<210> 156

<211> 737

<212> DNA

<213> Homo sapiens

<400> 156

agtctgggtc tggagcctga gccctgcgga acctcggcgc tcggccccac cccgcccgtta 60  
cctgcactta tttattgttg ttatttctta ccgcggagcc ccgcagtcgg gtcctcccgc 120  
ccgctcccgc gcagcgctag cattctccag tccctcagtc ccttcccgcg cgggtgcgccg 180  
cagccgaggc gatgcgcctc attcagaaca tgtgcacat cgccgagtag cccgcgccgg 240  
gcaacgccgc ggctccgac tgctgtgtgg gcgccgccgg ccgccgcctg gtcaagatcg 300  
ccgtgggtggg cgccagcggc gtgggcaaga ccggtgagtc gtcgcgctta gccctgggtc 360  
tggtcttgga cgaccctga cgggagttga ggctgaacaa ggctggggga gcggtgggag 420  
ctgcagcccgc accgctctcc gtccccgcgc agggagccgc tgccccttgg gagtgggctt 480  
agccgttggtc tacgccaccc gcctgcttcc acagacgggg gaaacaagga tcaagaatgg 540  
ccaggcagct ttctggggac caccggcacc gncgccatca gaactttggg gtgtttgagc 600  
ctctggcaat gcctggcaca gaaaggggag ttagtgaagc tagccccct gggaggtctt 660  
gaaggtagg aagacatggg tctactgga ggcttangtg ttgnttaanc cgggcttaaa 720  
aggaaggggt gggccca 737

<210> 157

<211> 680

<212> DNA

<213> Homo sapiens

<400> 157

```

gacaccctct ccgcgatgac tgtgagtggc ccaggggacc ccgagccccg gccggccacc 60
cccggggcca gctcagtgga gcagctgcgg aaggagggca atgagctgtt caaatgtgga 120
gactacgggg ggcacctggc ggcctacact caggccctgg gtctggacgc gacgccccag 180
gaccaggccg ttctgcaccg gaaccggggc gcctgccacc tcaagctgga agattacgac 240
aaagcagaaa cagaggcatc caaaggtagg ggaatgggtg gccctgggtg ggagctgtag 300
ggcttctgtg gtgggcaagg actctgggac cgctgcaccg tcacattctc ctcccttggc 360
cccagagaca catctgcctt ctttctttcc cactgcctcg ggcctttcct tttctgcagc 420
taccctcacc ttttctgagg ctgaagcacc gagccccaca ttcgtccccc ccaccttctt 480
ctggcctttc ctcgagatct ttcctactg ctcttgccg gagacagtgg cctcatgggt 540
gctgacagcg ctccgtgttg tgctcagcca ttgaaaagga tgggtgggat gtcaaagcac 600
tctaccggcg gagccaagcc ctaganaact gggccgncgt gccaaagctgt cttgacctgc 660
anagatgtgt gagcttttga 680

```

<210> 158

<211> 765

<212> DNA

<213> Homo sapiens

<400> 158

```

agaggggagac ccgcggcaac cccggcaacc cagggtctcg cgctcgtgcc accatgacgg 60
gaagcaatat gtcggacgcc ttggccaacg ccgtgtgccg gcgctgccag gcccgttctt 120
ccccgccga ggcgattgtc aacagcaatg gggagctgta ccatgagcac tgcttcgtgt 180

```

gtgcccagtg ctccggcccc ttccccgagg ggctcttcta tgagtttgaa ggccggaagt 240  
 actgcgaaca cgacttccaa atgctgtttg ctccgtgctg tggatcctgc ggtgagttca 300  
 tcattggccg cgtcatcaag gccaagtgtg agaagccatt cctggggcac cggcactatg 360  
 agaagaaggg cctggcctac tgcgagactc actacaacca gctcttcggg gacgtctgct 420  
 acaactgcag ccatgtgatt gaaggcgatg tgggtgcggc cctcaacaag gcctgggtgtg 480  
 tgagctgctt ctccgtctcc acctgcaaca gcaagctcac cctgaagaac aagtttgttg 540  
 agttcgacat gaagcccgtg tgtaagaggt gctacgagaa gttcccgtg gagctgaaga 600  
 agcggctgaa gaagctgtcg gagctgacct cccgcaaggc ccagcccaag gccacagacc 660  
 tcaactctgc tgaagccctc ttgcgagct gcctctcggc cccttcgctt ctnccttcc 720  
 gnttgtccat gcttggcccc ctgctccca tncacctgtg ccctt 765

<210> 159

<211> 879

<212> DNA

<213> Homo sapiens

<400> 159

gtattcatta aaagaaaact aactggaaaa caggtagat taattcagta ctattaaana 60  
 agaattcaga gctgttaata tttatcaca ggataggata cttaaaatat agcattctgt 120  
 gctgagatct aaggtgaagt ctataaagat taaagttccc tttttctga tgttcaagtt 180  
 gattgttggt cagtatggca tatatgaca aagtatattt gagtcaaagtg tggctttcta 240  
 aatggatgc aacatgtaga tccatacaag ttggggtagg atatacccaa gcgtgtatat 300  
 atttgctcag catgtgaaat aataaaaata atacaaaact actcattctt caaggtagtt 360  
 acagtttcaa tgccactctt cctgtcccca tattcattaa gacagaagct tgatgcttaa 420  
 acacacactg gtatgaaaat gttttgtgtt ttctgttata ttgtcagaag tgacattgat 480  
 ttgaaaggat gagagcctta tttcttgca acccttactg aaaggcatga tttcaggtga 540  
 aaatcttcag tgatttttaa catatgtcac atgtttgcag taaggtcagt ctttccaatc 600  
 acagatagag ttatgcatct atattctacc aaatattagc aaaaccaatg caatacgtgt 660  
 ctggctttgc aatataaagt aagcttgggtg attatattta agtgaggtta cttgaaatan 720

gtcatttagt ttacatacag ttttaattctc atgccacaat taataaggna tcacatgact 780  
gcaaaatccc tgcancaaac ttctagctct gatattggta agatacttgg ctgaagtgga 840  
nataactggc tgtgctgcac ttaagctgtc tgaggtgng 879

<210> 160

<211> 779

<212> DNA

<213> Homo sapiens

<400> 160

ttccaggtag catttgtag ctggtagaca aggactttgc cgtgaatttg ttagtagcaa 60  
ggaatgattt cttccagctt ccttgaaatg aataattagt aaacttctaa gcaaagtcaa 120  
tgactaggag tttcacatgt ttgtgaggtc ctaactaatt ctcttaccba gatgccacct 180  
ccatgaatga tgggtgcttta ggcttctgga atatgtaaaa acagcaaagg gaaccaagtc 240  
tagactgcat actggtaaac cagggaagac tcagaactgc atatgcatcc tcatgcattc 300  
ctttgtaaag accaccagta ctaaaataac tggacactca ttgtacctcc cagcgataag 360  
tatgtgtaac aggccagtgt gttgtcccca tgatcatgaa ttaggcttgg gatgcttcca 420  
aatatattca aggtgttggga acaggatagg cagctgtgac tccctcaaga gtccttagaa 480  
ttctaaataa aatgcagagc catcctaaga cacaggggta tggacaaggc ctggtgacac 540  
caaagggtgt tgtatccaat tgaaaagggt cctgtctcaa tttcatacca cctttattgc 600  
agttaaaaaa aaatcacact ctggggacac ttggtggaat tacagagcca ccatcatcat 660  
tccaaccact atttcatttt ctgnagtttt acctgtgtgc aattactccc cctncattct 720  
ggtccacttc ttacttctta gtaccaaata ctctggttgg gattgagcgc tgnctctgg 779

<210> 161

<211> 691

<212> DNA

<213> Homo sapiens



<400> 161

tcttgaactc ctgacctcaa gtgatccacc caccttggcc tcccaaagtg ctggaattac	60
aggtgtgagc caccgtgccc agccaaaatt cttaaagaat aaaccaaatac ttaaacaatac	120
ttccaattag aattattttc agccaaatta tcatttaagt gtgagagtaa aataaagaca	180
ttttcttttt tectttctct tttttttttt ttttttgaga tggagtctcg ctctgtcgcc	240
caggctagag tgcagtgggt caatctcggc tcaactgaag ctctgcctca ggggttcattg	300
ccattctcca gcctcagcct cccaagtagc cgggactaca ggcgcccacc accatgcctg	360
actaattttt tttctatttt tagtagagac agggtttcac cgtgttagcc aggatgggtct	420
caatctcctg acctcgtgat ctgcctgcct cggcctccca aagtgttagg attacagggtg	480
tgagccaccg cgcccggccg ataatgtgtt gttttaaggc attaatattg tggtagacatac	540
aaaagtaatt tgtgtgtaca tacatgcata tatacntata tatgtacaca cacatatatt	600
tggtaaacct acacacagtg tttattttat tatttcgata aaactattat tcacagctga	660
gccttgnggt gcactggaat agnncttttc g	691

<210> 162

<211> 661

<212> DNA

<213> Homo sapiens

<400> 162

ctgttggttg attgaaaatt ctctttcatt gtcaactgaa cgctggactg ccagacagtc	60
ccaaatggcc tccctgaaat gcctgactgt tgggtgccact tgccatctgg gagatcagct	120
ggagcttttg agcaggactt catttgtcct tctctttggc ttctcctcat cactacttgg	180
ccttcctcac agactgatgg ctaccatcca acaaaggacg ttccaatggg tgctgaaaag	240
ctgtgtaact cttagacccc agacctcaaa gttacacagt gttacatttt tccaataaaa	300
caattaaata aaaaaattaa ttttatggat acataatagt tgtgcctttt atgcgataca	360
tgtgataaat tctatttaga tattttaccc atttttaatac agatctattt gctattgagt	420
tgtttgagtt ccttatatat ttgattatg aatcttttgt caggtaaga gtttgcaaata	480
attttctccc attttataga ttgnttcctc acttttggtta ttgtcactct tacaagattc	540

aatttgttga gtttgtgaga tgagattata gtcaaataagg taaatctacc tncigtntaac 600  
tactcaataa tataatttat ttattcaaaa aatggtaatt gctgggntga agatatagat 660  
g 661

<210> 163

<211> 741

<212> DNA

<213> Homo sapiens

<400> 163

gaataaaatg tacaaatttg ttgtgttttt ttatgttcta ataatactga gacttctagg 60  
tcttaggtta atttttagga agatcttgca tgccatcagg agtaaatttt attgtgggtc 120  
ttaatctgaa gttttcaagc tctgaaattc ataatccgca gtgtcagatt acgtagagga 180  
agatcttaca acattccatg tcaaactctgt taccatttat tggcatttag ttttcattta 240  
agaattgaac ataattatth ttattgtagc tatatagcat gtcagattaa atcatttaca 300  
acaaaagggg tgtgaaccta agactattta aatgtcttat gagaaaattt cataaagcca 360  
ttctcttgtc attcaggtcc agaaacaaat tttaaactga gtgagagtct atagaatcca 420  
tactgcagat gggatcatgaa atgtgaccaa atgtgtttca aaaattgatg gtgtattacc 480  
tgctattgta attgcttagt gcttggctaa tttccaaatt attgcataat atgttctacc 540  
ttaagaaaac aggtttatgt aacaaagtaa tgggtgttgaa tggatgatgt cagttcatgg 600  
gccttttagca tagttttaag catcattttt tttttttttt tttgaaagtg tgttancatc 660  
ttggtactca aaggataaga ccgaccataa tacttactg aatattaata atctttacta 720  
gnttacctcc tctgntcttt g 741

<210> 164

<211> 781

<212> DNA

<213> Homo sapiens

<400> 164

gagcactgga tttggagtca agaaacctgg acacttggct ccacacttcc ttagctgggt 60  
aactttgggc aaaccgcttg gtctctcaag cctaaggctt ttcagctata aaatgggaat 120  
aatacttcac taactacctc acagagttgt ggtaagaata taatcagata actggataaa 180  
aacactatat aaactggaaa gcgccgtaca aatgtgagag atcagtttta ttatcaaata 240  
actgttttcc actgcctctt gaatcggtt tattctaacc aaccattaca tctttctcat 300  
cttttggagt atgggtaatt gaggcttggg tgtgtcatca gggactggag ttatttcagc 360  
tcccatgtag aggtgggaga ggtggttgat ggggcagtgg aagttagata ccagcgatgt 420  
atatggtagg acattttcct gggtcacttt gacagtacct tgggaaattg tcaatccttg 480  
cagagggcct aggttgggca caaggagaga agcgaacagt tgactaagaa ttgaggggag 540  
ggtctggagc gctactgcc tcctgtcatt gctgtgggtg ggagaggcta agactacagg 600  
tttgactgga ggcctangag agaagagtgc cttagggttt caagaatttt aatgcctagc 660  
agctgagtaa caggcattag tctgatagat agtgaaaggg gagaaagtgc ccctgntgtg 720  
agancacctt ttcanggcaa caactggctt ggtatcacca gcaaccctta accctgggca 780  
g 781

<210> 165

<211> 734

<212> DNA

<213> Homo sapiens

<400> 165

ttccttgta accaagttac ttttaaaaag atccttttta aactgattct tcctcagctg 60  
ttcttcagcc ctctatactt ttccataaaa gtcaccagtg actgccagct tgccaaatag 120  
aatgaatacc tttcagtgtc cagctgtctt gacctctccg cagcatttca caccaccac 180  
caaccctcag tgaaacaacc tcctccctta gcttttatga caccacaagt ctctggattc 240  
tcagagaatc cagaaaaaca agtctctgga ttctctctc ttacctctca gccacacag 300  
gtgagctgt ccttgaaacc tagatggggg aaatgtctgt ggctgtctgt ggtctcttct 360  
tttcaggagt tgggtaggga ggaagaatca cagctgtctc tgcttctct gtctgtctct 420

ctatttcctg agtcccttcc ttttcctgaa ctcagttctc ctcatgccaa ccatgtttat 480  
 gagctcctgc tgggaggaca gcatctgtga gtccttcctc ctgtctctcc cagacaacac 540  
 agaggtttta gcctgtttgc taagagaccc catctaagtc agcccaaggg tgtggattag 600  
 gttttacagc atccaggccg cagtctggct aaactggatt accaggctgg tgggcagctc 660  
 ctnacatga tcctgcacca gttagagcct gctgtagttg ggaaggacct gggattgtgg 720  
 naagatgtgn ttcg 734

<210> 166

<211> 738

<212> DNA

<213> Homo sapiens

<400> 166

ataggccagt gccggggttt aagggccagg aaaggaagca ttcagggaat ttaggtgtag 60  
 ccagaagaaa atcaggtcct ggctccccag aagcaagaga gttcaagtga aggaaggagg 120  
 aggttcctgg atgtggatgt catcatttct gggaacactc ttaaattggag actcagattt 180  
 cttagccaaa atttagggag gatccagaag aaaccaaaga cgaagcatcc cagttcttgg 240  
 gtatttcctg aaacagaaga aaatgacaaa ggcccaggaa tctactgaccc tggaggatgt 300  
 ggctgtggac ttcacctggg aggagtggca gttcctgagc cctgctcaga aggacctgta 360  
 ccgggatgtg atgttggaga actacagcaa ccttgtgtca gtggggtatc aagccggcaa 420  
 acctgatgcc ctcaccaagt tggaacaagg agaaccacta tggacactag aagatgaaat 480  
 ccacagtcca gcccacccag aaattgagaa agctgatgat catctgcagc agcccttgca 540  
 aaacaaaaaa atactgaaga ggacgggaca acgctatgaa cacggaagaa ctttgaaatc 600  
 atatttaggt ttaaccaacc agagcagaag atacaacaga aaggacctgc tgagtttaat 660  
 ggagatggag cttttctnca tgataatcat gaacaaatgc ctacngaaat tgaattncct 720  
 gaagtagaaa acccatca 738

<210> 167

<211> 575

<212> DNA

<213> Homo sapiens

<400> 167

```

aaaaaggaga ggaggggctc ctgggaacag ggctcagagg caggcgaggt ccctgattca   60
ctcactcact cactcattca ttcgttccca cacacactaa gcagacatgt gcccagcacc  120
tcctttgtgc caggcccat ctggatgtcc atgccaggag agaggcaggc agacctgggc  180
ctcccaggat ggaggacgga cgaagaccac tgagcatgat gagaggggaa aagctgaaat  240
gtgagtggga agctcctgct caccacggca gccccctggc tagcacggcc tggcagagtc  300
catatggaag gaaggaacca ggttctatgg gatcatagag gagcggacgt gatgcagcct  360
ggaaaaggcg ccctggagct gagggtaggg atgccaatag gcattagcca ggctgtgggt  420
gggaggtggg gagaggggat ccctgcaaga ggcaccaagg cacaaaaagc agcttcctgg  480
aggggaggtt cggaggtctc tgagcatcct atgaaatccc atagtgttg ccttggatct  540
tccaggaagc atgagacca ccnagctgan gacna                                575

```

<210> 168

<211> 868

<212> DNA

<213> Homo sapiens

<400> 168

```

caattactac catcttccag agattcttgt gtgtcctctc cttagaaaga aaatagagtt   60
tgagggtatt gactgctttc ttactgact gagtcttggt gaagcagagg aaatgtaatg  120
agccactgaa aaggttttat gtaaattaac attgtaaagc cagtttcaaa ttttattctg  180
ctactggtta aagaaagtaa agcatagagt ataaccttgg aactatatgg ataaaaactt  240
aaagaatcca gtggatttca tgtaagtaga actctagtga gccatagatc ataaagattt  300
ttagggaagg tgaatgaaac agaataacca ctccaaaatg attcctccag ctggatacac  360
tgtcaacatt cactgtccat cttggctaaa tttctactgt aaaccaaaga tataaaaagg  420
gatatatgtg tactccttta ccccttttcc tttcctagca gtagcagtcc agtagagtaa  480

```

tttgtaaaca taaaagcaac attaaagtat gaggaaattt gaatataaaa ctgtaagaaa 540  
 ataatgtctc acatttgtca tatactgaaa gtattaaaca ggacccttcc atatgtttct 600  
 tagcagtttg ctttcagtct taagtgtctat ttcctcaggg tttcatacaa acttgacctc 660  
 tcaatcccag atcaattgat ttcctaggag tcatttgtat gtaataagca ggtgccccag 720  
 tataaataat ggggtggatag aagcataata tctacatcag aagaccttgg tctatctgng 780  
 ctatcagcca actgcaggtt tctactagag ccatgactag aaagggntgc agataaatca 840  
 gatgnittca gaaaagaagt gtccacca 868

<210> 169

<211> 861

<212> DNA

<213> Homo sapiens

<400> 169

agtgggctcg aaacaaaggg ctgtccggtg gggattcgtc gcggcgcctt ctgagtggtc 60  
 gggtcgaggc ttctcggcct agcagtgccc tcgctgcgcg atctcaggcg ggttctcctc 120  
 ggctccgcgc agcccgcgcc gcgggtggggg acccggcgca gcggcacctg ctgccgaggg 180  
 accccgcggc cgcggcggt gctcgtgatg gggctgatct tcgccaaact gtggagcctc 240  
 ttctgtaacc aagaacacaa agtaattata gtgggactgg ataatgcagg gaaaaccacc 300  
 attctttacc aattcttaat gaatgaagtg gttcatactt ctccaacat aggaagcaat 360  
 gttgaagaaa tagttgtgaa gaacactcat tttcttatgt gggatattgg tggtcaggag 420  
 tctctgcgat catcctggaa cacatattac tcaaatacag agttcatcat tcttgttggt 480  
 gatagcattg acaggaagc actagctatt acaaaagaag aattatacag aatgttggct 540  
 catgaggatt tacggaagc tgcagtcctt atctttgcaa ataaacagga tatgaaaggg 600  
 tgtatgacag cagctgaaat ctcgaaatac ctcaccctta gttcaattaa ggatcatcca 660  
 tggcacattc aatcctgctg tgctctcaca ggagaagggt tatgccaagg tctagagtgg 720  
 atgaccttcc ggattgggtg gagataactt ttttgcttga aagagactgc tctatttatt 780  
 ctgngacatg aacatTTTTT tctaagnacc ctttgctgnt aagcaacaac atgtttaatt 840  
 ataacaaccc aaaacctttg a 861

<210> 170

<211> 858

<212> DNA

<213> Homo sapiens

<400> 170

```

tttcttgctg taccccggcg atggaggcgc cggcttcgga gtgcgcccgc cgccgcagca   60
gcagcgctcc tggaggaccc cgccgtcccc cggctcaccg ctgcccttcc tgctgctgag  120
ctacccgagc ggCggcggcg gcagcagcgg cagcggcaag caccatccta attatctcat  180
ggctaataaa cgcatgaacc tcatgaacat ggccaagctg agtatcaagg gcttgattga  240
atcagctctg aacctgggga ggactcttga ctctgactat gcacctctcc agcaattctt  300
tgtggtgatg gagcactgtc tgaacatgg cttgaaagct aaaaaaactt ttctcggaca  360
aaataaatcc ttctgggggc ctctagaact ggtagaaaag cttgttccag aagccgcaga  420
gataacagca agtggttaaag atcttccagg acttaagaca ccagtaggta gaggaagagc  480
ctggcttcgt ttggcattaa tgcaaaagaa actttcagaa tatatgaaag ctttgatcaa  540
taagaaagaa cttctcagtg aattctacga acccaatgcc ctcatgatgg aagaagaagg  600
agccataatt gctgggtctgt ggtgggtctg aatgtcattg atgccaattt ctgtatgaaa  660
ggagaagact tggactctca ggttggagtt atagatTTTT caatgnatct caaggacggg  720
aacagcagta aaggtactga aggagacggt cagattactg caattctgga ccagaagaac  780
tatgtagaag actgaacaga cattttaatg ctactgnaaa caancttcag gcaaagtaga  840
tgcnttagaa aaatccac                                     858
    
```

<210> 171

<211> 692

<212> DNA

<213> Homo sapiens

<400> 171

gtctctgatt ctctgacacc acctaggtgt cccctaattt ggttcagttc tgacactagc 60  
 ttttcagggt tcgtgccggc ctcacaagtt ttgagggtta agtcccacaa gaccatcccc 120  
 atttccgtca ccagttgcat gtcctaagcc acctgtactt ctgatcaact ggctgtaaat 180  
 tggggttccc atgacctcac ttcaggttcc ataatttgcc aggacaactc acagaactca 240  
 gaaaggcact ttgcttattg ttagtggttc ctataaagct aggttgtcca acccgcggtc 300  
 caggatggct ttgaatacgg cccaacacaa atacttaaac tttcttaaaa catgatgagt 360  
 tttttttgaa attttctttt tctcatcagc tgcagttaat gttagtgtat tttatgtatg 420  
 gccaagatg attcttacag tgtgtgtggc ccagggaagc caaaagattg gacacccctg 480  
 ttttaaagga tgcaacttag gaacagccca aaggaagtga cacacgggac gaggggtggg 540  
 agtccccatg ccccttgggg gagacacctt ctagtgcacc atcccaatga gttcatgacg 600  
 tggaggcttc ccacatccca tttttcaaga gtttttgag cccagtcttc tggcccccca 660  
 ccccttccag angttgggggt gtanggggtg cn 692

<210> 172

<211> 838

<212> DNA

<213> Homo sapiens

<400> 172

tagaagatgg agagtgttaa attatatttg tgataggaag cttagacata tcttttggtt 60  
 attagcttcc attgccaatt gtatttcaga tgcatagggt tttcttccca aaaatatatt 120  
 gttaactttt atagctaact agcacctgga aaaaatgtat ttgtacaact ttactattgt 180  
 atatagtttt ataataatga aaaataaacc caatggccat attagaatgc aatttcgaca 240  
 tacagcttat ctagatagtt ttccagagga ttttgaaatt tggcttaact gggaggataa 300  
 ctgctcagca caccactgaa acataaccac tgacaccatt catttatttt aactgagatt 360  
 cttgacattt tictctccta tgccttggtt ctttagcata cttgaactca cataaatgct 420  
 tctttggatt acatgggcta tctgattcca ttttgatct gattgtccat cttgaattca 480  
 atatggtatt catctggact attcaaaaat tatgccattt ctagtctgtg aaataagatg 540  
 taaaaaatct ttatttttgc cctttggtta aaacctatgt gacaactttt aaaatgtgaa 600



gcaacatcta atatagttga ctggtatact aataggaaag tgaaagtatt tcatgggtac 660  
 tttgtcacag aatgtgaaaa gaaacttggc atantggcct ttataatgag gcatccactt 720  
 actcctctga agtgaagtct ggtagcttaa cttgggtata ggTTTTTgn aaggaaatct 780  
 catgaatcct cgnlcatttc tcttggcctt cncTTTTt atctcaaatgg cacaagtt 838

<210> 173

<211> 872

<212> DNA

<213> Homo sapiens

<400> 173

aaagtcctaa aaaactcttt gcagtctaaa cctcccaagt tttttttttt tggaaccaag 60  
 gcaactttac ccactagaga taacctagaa aatttctatc tttagttcaa ctgaactctc 120  
 agtggttatt catagaaacc accccagtct atttatatta ttcaacacat aattttgggt 180  
 agagaatttt tttttttttt taaattaggg atgggggtct tgctgtgctg ctcaggctgg 240  
 tctcaaactc ctgggctaag tgattccctg actgtacctg gccaagagaa gtttttgtgc 300  
 tgtggcttac cttagcatat ttctctgctt cttctcttat atcttttgga acaatttcat 360  
 gtcttccatt agttactgta aattaagcca catgtgtaaa tgaattttaa attgagtacc 420  
 atattgtaac ttgcagtata ccataggatc tacccaatcc acatatctga ctcacctaag 480  
 gttgcaaagt tgtactatga gtaatactcg aatatttttg tgtgtgctt ctacatgaga 540  
 ttatatgtgc ctacatatta agttcttatg gaaatgaaag taaattatgc tatttataaa 600  
 tcctgagcat taatttatag catagtatct taaaaccatg aaatggatgt ttcaaaaaat 660  
 aacgtgttca caacttaagt caattattaa gcagaacttt cccttcatta gacaacctag 720  
 taaatttgct ttagctttca ttatattaga aaggacactc agttgtaaat tagctgnggt 780  
 acagatcatt cctaaggcaa ataaatggtc cnaaaataac ttacattcac caaccagct 840  
 gagttctagt tcaaaagctt tacccttnac tt 872

<210> 174

<211> 816

<212> DNA

<213> Homo sapiens

<400> 174

```
tattatcatg gctacaaagt cttgtgtggt ctgggccaca tcctgtgcca ggctcccttt 60
cattgtctat attccagtca agctggcctt caaaatttca gcacattggg tctttctgcc 120
acaggccctt gcacatacat gcttttccct ctgtacatgt gattttcttt catccccgct 180
ttccaaagct aactctgact catccttcag actgcatctt aatgattact tccttctgga 240
agactccctt aattttcaca actagatgag ctctccctta tatgttgaaa acaagtattt 300
cttgtgtgaa cagaaatgtt taatgtctgc ctcccaact cagccacaag ctctgtgagg 360
atggggactc agtctttgca tccctcagag cctagcatag tctcagttaa tacgtgatag 420
ctggagcgtg acatttcatt aggaacagtg aggctagtgt agaaattata cctcaccagt 480
atataggaga gtaccattag gaattcttaa tgggatgaaa acctgaattc atgtctagac 540
cctgccacct gctggctgtg ctgtttttaa taaattgcag atcctctcag agcctgtttc 600
ctcatatata aaataatggg gatcctaaca gccccctcat atggttgtag caggaattta 660
attaaataat atatggaaaa gcattttttt aactgnaaaa ccatacataa atatcctttg 720
ncacttttcc cagtgcatac cacactgggt cattaaacat ctattgggat ggggtggatgg 780
gttggataga tggacnggac nggaattaac aggtta 816
```

<210> 175

<211> 834

<212> DNA

<213> Homo sapiens

<400> 175

```
agtggtagcg gttattcggc ggcccgcggc ggaccatggc cctggcccgg cgtcgtctggg 60
ctttcctcac ggcgtccccg agcagcgtcg cagagcgggc cgacttccgg gaaggaactg 120
accagcgact gagcggcggc cggcgcgcctt agcgccttga acatgcggca gtccctgcgg 180
gcgacccccg gctccggaca ggcggcggcg gaggcggcgg ctcgaggagg aaggaggcgg 240
```

cggcgccggc ggaggtggcg gcggagacgg ccggcgcccc gcgcggagacc ctagggaggc 300  
 agttcagcgc ggccctcgggc ctcgtcgaga aggatgctgt cccgaaagaa aaccaaaaac 360  
 gaagtgtcca agccggccga ggtgcagggg aagtacgtga agaaggagac gtcgcctctg 420  
 cttcggaatc ttatgccttc attcatccgg catggtccaa caattccaag acgaactgat 480  
 atctgtcttc cagattcaag ccctaattgcc ttttcaactt ctggagatgt agtttcaaga 540  
 aaccagagtt tccttagaac tccaattcaa agaacacctc atgaaataat gagaagagaa 600  
 agcaacagat tatctgcacc ttcttatctt gccagaagtc tagcagatgt ccctagagag 660  
 tatggttctt ctcagtcatt tgtaacggaa agttagtttt gcttggtgaa aatggagact 720  
 ctggttcccg atattattat tcaagacaat tttttttgat ggtcanaaga aagccggcca 780  
 ctttggaaga tcgtgccccaa tgaaagacta ccggaattnt tantgaaatt ccaa 834

<210> 176

<211> 720

<212> DNA

<213> Homo sapiens

<400> 176

aaattgggag ggcttcttgc aggctgctgg gctggggcta agggctgctc agtttccctc 60  
 agcggggcac tgggaagcgc catggcactg cagggcactc cggtcatgga gctgtccggc 120  
 ctggccccgg gcccgttctg tgctatggtc ctggctgact tcggggcgcg tgtggtacgc 180  
 gtggaccggc ccggctcccc ctacgacgtg agccgcttgg gccggggcaa gcgctcgcta 240  
 gtgctggacc tgaagcagcc gcggggagcc gccgtgctgc ggcgctctgt caagcggtcg 300  
 gatgtgctgc tggagccctt ccgccgcggt gtcattggaga aactccagct gggcccagag 360  
 attctgcagc gggaaaatcc aaggcttatt tatgccaggc tgagtggatt tggccagtca 420  
 ggaagcttct gccggttagc tggccacgat atcaactatt tggctttgtc aggtgttctc 480  
 tcaaaaattg gcagaagtgg tgagaatccg tatgccccgc tgaatctcct ggctgacttt 540  
 gctggtggtg gccttatgtg tgcactgggc attataatgg ctctttttga ccgcacacgc 600  
 actgacaagg gtcaggatcat tgatgcaa atgggtggaag gaacagcata ttttaagtct 660  
 tttctgtgga aaactcagaa aatcgantct gtgggaagca cntngaggac agaacatggt 720

<210> 177

<211> 240

<212> DNA

<213> Homo sapiens

<400> 177

```

ttttactttt ggttttaaact ttatgaagag accacaggac tctttcgagg ccctgtaatt   60
ggaatgagtc cacttttaaact cctttaacga ggatccattg gagggcaagt ctggtgccag  120
cagccgcggg aattccagct ccaatagcgt atattaaagt tgctgcagtt aaaaagctcg  180
tagttggatc ttgggagcgg gcggncgngc ctcgnatacc aacatttaaa atgatggcat  240

```

<210> 178

<211> 809

<212> DNA

<213> Homo sapiens

<400> 178

```

ggtaagtgac cctcgggcct cgccatgaag agccgcttta gcaccattga cctccgcgcc   60
gtactcgcgg agctgaatgc tagcttgcta ggaatgagag taaacaatgt ttatgatgtg  120
gataataaga cataccttat tcgtcttcaa aaaccggact ttaaagctac acttttactt  180
gaatctggca tacgaattca tacaacagaa tttgagtggc ctaagaatat gatgccgtct  240
agttttgcc a tgaagtgccg aaaacatttg aagagtcgga gattagtcag tgcaaaacag  300
cttggtgtgg atagaattgt agattttcaa tttggaagtg atgaagctgc ttaccattta  360
atcattgagc tctatgatag ggggaacatt gttcttacag attatgagta cgtaatttta  420
aatattctaa ggtttcgaac tgatgaggca gatgatgtta aatttgctgt tcgtgaacgc  480
tatccacttg atcatgctag agctgctgaa cttttgctta ctttggaag gttgactgaa  540
atagtagcca gcgcaccta gggatgaacta ctgaagaggg tgcttaaccc attacttccc  600
tatggaccag ctctcattga acactgtctt ttagaaaatg gattctcggg taatgtcaaa  660

```

gtggatgaaa aacttgaac taaagatatt gaaaaagtac ttggttctct gcagaaagcn 720  
gaagactata tgaaacaaca tcaacttcag tgggaaaggg atatattcatt cagaaaagag 780  
aaatannacc atgcttggga agccgataa 809

<210> 179

<211> 913

<212> DNA

<213> Homo sapiens

<400> 179

aggaagctgc atgcatgaga cccacagact cttgcaagct ggatgccctc tgtggatgaa 60  
agatgtatca tggaatgaac ccgagcaatg gagatggatt tctagagcag cagcagcagc 120  
agcagcaacc tcagtcctcc cagagactct tggccgtgat cctgtggttt cagctggcgc 180  
tgtgcttcgg ccctgcacag ctcacgggcg gggttcgatga cttcaagtg tgtgtgacc 240  
ccggcattcc cgagaatggc ttcaggaccc ccagcggagg ggttttcttt gaaggctctg 300  
tagcccgatt tcaactgcaa gacggattca agctgaaggg cgctacaaag agactgtgtt 360  
tgaagcattt taatggaacc ctaggctgga tccaagtga taattccatc tgtgtgcaag 420  
aagattgccg tatccctcaa atcgaagatg ctgagattca taacaagaca tatagacatg 480  
gagagaagct aatcatcact tgtcatgaag gattcaagat ccggtacccc gacctacaca 540  
atatggtttc attatgtcgc gatgatggaa cgtggaataa tctgcccac tgtcaaggct 600  
gcctgagacc tctagccccc cagcataccc cggctcangg gacacggaca caggcccagg 660  
ggagtcagaa acctgtgaca gcgtctcaag ctcttctgag ctgctncaa gtctgtattc 720  
accttcagg tgccaaagag agcaccacc ctgcttcgga caaccctga cataattgcc 780  
cagcacggca anangagggtg gcattccacc agcccaaggc attcgacatt tgcanaatga 840  
aaattccttc ttaatgggaa gaagaatccc ttaaaaatgg ggtcaaggat ccccnatgaa 900  
ttnttctggt tcc 913

<210> 180

<211> 684

<212> DNA

<213> Homo sapiens

<400> 180

```

aaaacgctgc gctggagcgg ggccggcggc gagtcccagg gacccaacca gagcctggcc 60
tgggagccag gatggccatc cacaaagcct tggatgatgtg cctgggactg cctctcttcc 120
tgttcccagg ggccctgggccc cagggccatg tcccacccgg ctgcagccaa ggcctcaacc 180
ccctgtacta caacctgtgt gaccgctctg gggcgtgggg catcgtcctg gaggccgtgg 240
ctggggcggg cattgtcacc acgtttgtgc tcaccatcat cctggtggcc agcctcacct 300
ttgtgcagga caccaagaaa cggagcctgc tggggaccca ggtattcttc cttctgggga 360
ccctgggcct cttctgcctc gtgtttgcct gtgtggtgaa gcccgacttc tccacctgtg 420
cctctcggcg cttctctttt ggggttctgt tcgccatctg cttctcttgt ctggcggctc 480
acgtctttgc cctcaacttc ctggcccga agaaccacgg gcccggggc tgggtgatct 540
tcaactgtggc tctgctgctg accctggtag aggtcatcat caatacagag tggctgatca 600
tcacctggt tcggggcagt ggcgagggcg gncctcangg caacagcanc gcaggctggg 660
ccgtggcctt cccctgtgcc atcg 684

```

<210> 181

<211> 785

<212> DNA

<213> Homo sapiens

<400> 181

```

aatgaccata attaatttat gctctcaaaa aataagtaaa aggaagaaaa tttttttaat 60
aaataaaaag acatcaaact taaatgtgta aattggtaca gcttaagtga atttgtgatt 120
tatgtctgct gtaatTTTTT ttatattagg aagtttcagc tatgaaggaa attttacact 180
tcaaaaagct gttcagtggc agaaaatatg ataatgacag attagatcac aatatgctaa 240
ttttttcaga gttacctctc gtgtaacaca gcttttgaaa atatttgaat agtactatat 300
tcttttttaa gtgaaaaaaa aaaagaaacc tgtaattgct ttataaagat tcagtgtgct 360

```

tcagcttcac tttgaatata tccacttagt ataatctaac attggttttc ttaataatgg 420  
 ttgtgtgact tacatgtag gaatcctcac agtacacatt ttacttttta tctgtttctc 480  
 agaaaatatt gactgttatt tctactaaa ctcataatat gcttaggcac taaccttcaa 540  
 caatacagta acatcttag atttctaccg aattgtgaat atgttattag atgaatattt 600  
 acctctccat gtgtttctgg cacatatctt caaagcataa ctattatgaa taaaattata 660  
 catttataac cactgtgaat agttacgtat ttaattactc agaactgtcc atgagaaata 720  
 ctatagaaat tatttaccat gtggngnatt ttatataaat tcattataat tgggngaaag 780  
 attaa 785

<210> 182

<211> 699

<212> DNA

<213> Homo sapiens

<400> 182

accgttaccg ggggcaacag ctgagccgtc tgggaaggga tgcattttt cttctgtatg 60  
 cttgagtcaa gaactctaag tcatcttggt aataccgggt tggatgctta aagctgcagc 120  
 aaaaagacca gaactttcag ggcttctcaa atttaataac tatggaatct tctcagaaag 180  
 tccattaaca tctcaaagaa caacgtggtt attgtatcaa tcaccatcct ttataaccagg 240  
 atttgcatat ccttcaagat gcctgaagac aatcggaggg gtatacaagc aagcgagggt 300  
 aagaacaatc acttttcaga tcctaaactt ttatatgtag tgtctgctga taatgcattc 360  
 cctgagaaaa tggacctgtg gataaacat catgcttcat ctatttctt gtctctctt 420  
 tcaccatttt tctttctttt cttttctttt tttttttttt ttcttgagac aagctcttgc 480  
 tctgtcacct aggctggagt gcagtggcgt gatcatatct cactgcaacc taaaactcag 540  
 gctcaagcag taccctcacc tcagcctccc gagtggctgg gactaacagg cgcactccat 600  
 catgcccga taatttttgg taatttttgg anagatgggg cttgcttgn tgnctaggct 660  
 ggcttgaact gggctcaagc gatcctccac tttggcctt 699

<210> 183

<211> 613

<212> DNA

<213> Homo sapiens

<400> 183

```
gttcgcaccg ccccgcccg caagaaagat ggagtggtcc tgatccgggc ccgttggcgg 60
cgctactgac gcttcgctcc ggtcctcgga tcccagagcg ggggaggcag accgactgtg 120
agctgcttgt ccccatcctg cggccgtcct ggggacacag agccctccgt ggtgcccggg 180
gattggattg gagccaggac gcggagccgc ggaggagccg gaggaagctg atggtcatct 240
tttccaaggt ggatgtgaac actgaccgga agatcagtgc caaggagatg cagcgctgga 300
tcatggagaa gacggccgag cacttncagg aggccatgga ggagagcaag acacacttcc 360
gcgccgtgga ccctgacggg gacggtcacg tgtcttggga cgagtataag gtgaagtttt 420
tggcgagtaa aggccatagc gagaaggagg ttgccgacgc catcaggctc aacgaggaac 480
tcaaagtgga cgaggaaaca caggaagtcc tggagaacct gaangaccgc tggtagcagg 540
cggacagccc ccctgcagac ctgctgctga cggaggagga gttcctgcgt tccttcaccc 600
cgagcacagn cgn 613
```

<210> 184

<211> 682

<212> DNA

<213> Homo sapiens

<400> 184

```
gaccaggatg attttagcat acgctggtag gaaaatgaaa tttaaagtga ttttcttaca 60
ttttatcag ttaggtttt ggtcattaaa aattttcact ccagttcttt ttatgtttat 120
tttgacttct gatttatcta ggaactagaa cctctggttg gtgaacagtt gctccagtta 180
tgggaacgtc ttcccttggg agaaaaaac acaactgatt gacactcagg ttataccatc 240
ttgactttga gtattggcag tatttgtgat cattaggaac ctttcagatt atttatcttt 300
tttttcccc tttcttctag aactcttagc tgtggaagaa catcatgcct atttataacc 360
```



actgaatgca ctgactttca aaaactgagg tggggtgtgt gttacgaatg ggcttttttaa 420  
 cactttttaga gtgttgcttt agaactacca tcttcatata caggagaaag gaagcattta 480  
 aattttttata gtgattatag agaatgatta tatgatgttt gtaatgaata aaatagtagt 540  
 ttcattatatt ggcacaatag cagttttattt taaacaaaca atttgaagtt aaacatttca 600  
 ttttttaaaaa cactgaatta cagntcttat tgatgacttt ttaatgcana gnaagttgtt 660  
 taagaaaggc ctgaatatat ca 682

<210> 185

<211> 858

<212> DNA

<213> Homo sapiens

<400> 185

agaaaagagg atgttctttc ttgaaaataa gcgacgacat tgtaggtcct atgaccgacg 60  
 tgctcttctt ccagctgtgc aacaagagca ggagttctat gagcagaaaa tcaaagagat 120  
 ggcagagcat gaagactttt tgcttgccct acagatgaat gaagaacagt atcaaaagga 180  
 tggccagctg attgagtgtc gctgctgcta tggggaattt ccattcgagg agctgacgca 240  
 gtgcgcagat gctcacttgt tctgcaaaga gtgtctcatc agatatgccc aagaggcagt 300  
 ctttgatctt ggaaagttag agctcagctg catggaaggc agctgcacgt gttcgttccc 360  
 aaccagttag ctggagaagg tgctcccca gaccatcctg tataagtact atgagcgaaa 420  
 agccgaggag gaggttgcgg cagcctacgc cgacgagctt gtcagggtgcc cgtcctgtag 480  
 ctttccggct ctgttggaca gtgatgtgaa gaggttcagc tgcctaatac ctcactgccg 540  
 aaaggaaacc tgtaggaagt gtcagggact ctggaaagaa cataatggcc tcacctgtga 600  
 agagctggct gaaaaagacg acatcaagta ccgtacctct attgaagaaa aaatgactgc 660  
 tgcccgcatc agaaaatgcc caagtgtggg actggcctca tcaaactctga aggctgnaac 720  
 ccgnatgtct ttgccgctgt ggtgcccaga tgtgctacct ctgtcgagnt tctattaatg 780  
 gatatgacca tttctggcaa catccccgtt accaggagcc ccttgccagg aatgggtcaag 840  
 atgctctntn tggaccga 858

<210> 186

<211> 805

<212> DNA

<213> Homo sapiens

<400> 186

```

taattatatg gcagggtttt ggtagccaa aaaaaacttc tttttaata atccagtga 60
ggatTTTTTA agcttttaaa atgttaaatt ctgatagtct taaatigaag tcaaagcatt 120
tctTTTTTtc tttttccctt agacttcttt atgatctaag acacttatga aggtaccagg 180
tgccctaatt gaccttaaaa ggtagaaat gaatctttgc cttgatgcaa agcatcagac 240
ttgatgcaaa tcaacatata aataactgca agcaaataa gactcaactc tggactatTT 300
aattttggTT tatctgtggc taatcttgTT ttcaaagca tggacagaac ctattcaact 360
acaatgagta tgggctcaat cctaccttGT tggatatcTca aatccccctg tttactTTta 420
ggcagtaact gcctttgaaa acagaacatt tcccttttcc agagcagacc ttacctcagt 480
ctctgaaatg ggtagacttt cagggaagac tcaacaggct tccagggtgtg aaaacaggaa 540
ggtcattctta aattagatTT taatattatg gcctcattgc ttcatcattt tgctagaagg 600
aaattccctg aatatcagat acacccctat tcaaataaaa tcacaaaacc atctactaaa 660
gctaaacagt ttttcaaaac cattctgaat tatgcagtaa tatttccttc tgtaagaata 720
tgctctggTc tgtaaacCGa gtattgagag aattgagaat naaaccactt cgcagatagc 780
atgaanagga aatgaggnat gaagt 805

```

<210> 187

<211> 805

<212> DNA

<213> Homo sapiens

<400> 187

```

ttaaagaaa ctatttaatg taaaatatTC tacatgtcat tcagatatta tgtatatctt 60
ctagccttta ttctgtactt ttaatgtaca ttttctgtc ttgcgtgatt tgtatatTTc 120

```

actggttttaaaaacaaacacgaaaggcttatgccaaatggaagatagaatataaaata 180  
 aaacgttacttgtatatattgtaagtggtttcaattgtccttcagataattcatgtggaga 240  
 tttttggagaacccatgacggatagtttaggatgactacatgtcaaagtaataaaagagt 300  
 ggtgaattttacccaaaaccaagctatttggaaagcttcaaaaggtttctatatgtaatgga 360  
 acaaaaaggggaattctcttttcctatatatgttccttacaaaaaaaaaaaaagaaatc 420  
 aagcagatggcttaaagctggttataggattgctcacattcttttagcatatgcatgta 480  
 acttaattgttttagagcgtgttgctgttgaacatcccaagagaagaatgaaaactgggt 540  
 ggaaactaaaggttcattgtgttaagtgcattaatacagttattgtgcttttcaaaaa 600  
 tgtacacggaaatctggacagtgtctgcacagattgatacattagcctttgctttttctct 660  
 ttccggataaccttgtaacatttgaaaccctttaaggatgccagaatgcattattcca 720  
 caaaaaaaca gcagaccaacatatagagngnttaaaatagcatttctggggcaaaattcaa 780  
 actcttggggcttaggactcacatn 805

<210> 188

<211> 866

<212> DNA

<213> Homo sapiens

<400> 188

gcgggcgggc tgctgaggctgctgtcgccggccccgatggacgctccccgggcgggggtt 60  
 gagtcggcgc tcagctgcttctctttcaacaggactgcatccctagcaactggaact 120  
 aaagccgggtataagctgtttctctgagttctgtggagcagctggatcaagtccacgga 180  
 agcaatgaaa tcccggacgtctacatcgtggagcgctcttctccagcagcctgggtgggt 240  
 gtagtcagtcacacaaaaccacggcagatgaacgtgtatcattcaagaaaggcacagag 300  
 atctgtaattacagctactcagcaacatcttggtccataaggctgaaccggcaaaggctg 360  
 ctggtttgcc tagaagagtcattttatattcacacattaaagacatgaa gctgttgaag 420  
 accctcctggatattcctgc aaacccaacaggtctatgtctctctatcaaccattcc 480  
 aattcttacc tggcctatcc tgggaagcctgacttcaggggagattgtgctttatgatgga 540  
 aactccctga aaacagctctgcattattgctgccatgagggaacactagctgccatcacc 600

ttcaatgcct caggctccaa actagcaagt gcgtctgaaa aaggcacagt catccgggtg 660  
 ttctctgtcc ctgatgggca aaagctctat gaggatccga gagggatgaa aaggtatgtg 720  
 acaatcagct ctctagtggc caatatggat tcacaattcc tctgcgcctt cagtaacacc 780  
 gagacggtac acatcttcaa gctggacagg tcaccaacag tcgaccagaa gagcctttga 840  
 nctggagtgg cttcctnggg aaagan 866

<210> 189

<211> 760

<212> DNA

<213> Homo sapiens

<400> 189

gtaagattct tgttgggagc ttaagaatag attcctgagc taggcctttg gagactctgg 60  
 catgctgtgt ctaggaggga gtctgtaaaa caatttttaa tgaagaaatt taaaaattac 120  
 acaaaaactag aatagtgcac tggactcaa catccagatc tgacacttat cactatctta 180  
 ccatgtttgc ttcatttgct atttttttgt ttgcttaagt atcttaaaat cccatacatt 240  
 gtgttatttc actgctgtga acactttggg tagataccac gatatcacac ctaacagagg 300  
 cagcagcagt ccttcggctt catctcatag ccagtcctta agcaaatttc cctgattatc 360  
 tcaaaaatca tcttctagtt ggtttgtag aatcaacaga atataagtca catgatgac 420  
 tcgtttttta caatcacctc agatgacttt gatgtagct actttgagaa cacttgaaa 480  
 ttattttgcc aacttgaaag ttcaagtag gataccacaa ttcttggcac gtttggtgga 540  
 ttataaatgt gattttgaaa tattagagga agcatttggg gttaatgaca ggatatgaat 600  
 ttatataggt aagtttgata agataaaatt tcctcagtga acggagaatc tcagcccat 660  
 gggctctaatt tgattgggac ttgtgtaaga gcgtgggtcac agnttaatcc aactggactg 720  
 tatgctgngg nctcactcat ggtggggctt atttacactg 760

<210> 190

<211> 850

<212> DNA

<213> Homo sapiens

<400> 190

```
gttcagtatt caaagaatgt cttagatta tgataattaa agaagtccca ggacgagaca 60
aatgaatca aagattttgt atgcaagtcc acaaagtctg tcagacatat tgtaaataat 120
ttaccattga ttttattttc aacaatgtta atgtattgac atttagcata tatctgtag 180
atagatatcc tatcacaatg ttttattcct tgcaccagcc ctttactatt ttctaacaaa 240
aaaaaaaaaa cacaatttca gggcataaac aagaagtgtt tatttttccg tagtacatct 300
ttgggttgac tagagattgg ctgttctaag atgtgctcat gcaggcttga ctctaaacta 360
tgcatttaga gtcattttgt tctggctctg tctacacgta ggttattctt ttgaaagcag 420
tactctgtct taagcatgtt cttctcttag tggagtttgg agatgctaata atcgacaggt 480
ggaggcagaa tgctccttaa agtctaaact agaattgccca cactgtcttc ctaaggttca 540
taagccaaag gaaatctcat ggcaatttcc aacattagtg ggacaagaga ttatactact 600
cccaaggaag tggagggtggg gaaaggaatg attatttctg tatcataatc taccatagtc 660
cttaagtga cgcctcttgc tacttcccaa tgnittacta atcacattga cttttaaaaa 720
atagattccc taggaattca agaaaaatac ttattttcta aataaatcac cagcaaggac 780
agacacaatt ggctcactac cccaatatc ctaacaccac ttaccaaata ccnggtataa 840
tcatnncac 850
```

<210> 191

<211> 864

<212> DNA

<213> Homo sapiens

<400> 191

```
tttcatgccc ttgttttaaa aaaactactt tttttggcct caaaaaaatc aagggtgtaa 60
ttttaataa attgttaatc ctatgttttg taattttcat tttaggagct tgacttattt 120
tttctctct cataaaaaca catttgtttt aattgtagga gaaattttct cagcattttg 180
catgttcttt ctaatctttg ttggtctgaa tatattggta gtaattactg taattattca 240
```

acaaaaagca tatccgttca aaaatitttc cactatgtct tttttctagt ggctactgtt 300  
 ttagttttct agttgaatat ctctgacaag ctttcgtatg gttttgttat attaagtgtg 360  
 tttcaaagtg aagactacag cacctcgccg gtactgtgtg aggcccaaca gtggaattat 420  
 tgaccaggg tcaactgtga ctgtttcagt aatgctacag ccctttgact atgacccgaa 480  
 tgaaaagagt aaacacaagt ttatggtaca gacaattttt gctccaccaa acacttcaga 540  
 tatggaagct gtgtggaaag aggcaaaacc tgatgaatta atggattcca aattgagatg 600  
 cgtatttgaa atgcccaatg aaaatgataa attgaatgat atggaaccta gcaaagctgt 660  
 tccactgaat gcatctaagc aagatggacc tatgccaaaa ccacacagtg tttcacttaa 720  
 tgataccga aacaaggaac taatggaaga gtgtaaaaga cttcaggag aaatgatgaa 780  
 gctatcagaa gaaaatcggc cctgagagat gaanggttaa ggctcaaaaa ggtagcncat 840  
 tcggataacc tggacacctn actg 864

<210> 192

<211> 706

<212> DNA

<213> Homo sapiens

<400> 192

ggaaagatga ccgatggagt ccaaagccaa gtggcttcac cagctgacaa gccaccctcc 60  
 tgcagcctga gtttcacagt ccactgggtt cggtgtcatg cgggtgttga atggttaagc 120  
 ccttgcagta tttcagatcg ggcaaaaaat atcggatgca catagcagaa ccattgggtg 180  
 tatttatagc ttgtcttctg actcctcact gtttctgcct acgcaaaata tccatgtttc 240  
 ctctgagaaa tctgttgtgg actgaaagcg ctgctggctg tgaaatttaa taaagtgtgt 300  
 atgctttgct agaaaattat ttcttggaca ataggaacag tcattgatct gtaaactctg 360  
 gctcttaaca gtgagtggcc aaggacttga tcagccatt tcttggctcc tcagtgcctt 420  
 aaaatttaag tagcactgca ttttgtaatg ttgaatatga ctctagtac ttgtaggagg 480  
 cacttgtgag gagatgcttg cttcagtgtg aaagatgctc atggcctgag tcagttgagt 540  
 tttctttcaa gaaaccactt cagagtgaat tatccagggt tccccgcc tggacatgtc 600  
 cagcctgccc aggagcaca cagncctgta agtccacctc gtgtgggtga gatttcctcc 660

tgcgatgatga cctcatcgnc atctctgctg gctcattcca cagnct

706

<210> 193

<211> 719

<212> DNA

<213> Homo sapiens

<400> 193

```

ttttttttgc gagtggcggg ccgactgtgt agtccgctcc ggcagcgcgc tctgcccggc 60
ttcctcagtc tcctcgccgg gagcgtccgg gagcagctcc gaggccgcgg cgaaaccagg 120
tgaggtccga ggttcggagg agtatcagag gttaggggaa ggccggagaa tgggctggga 180
ggctgcgttt cggagcttag ggttctgtcc ctgcgatcgc cgcgtctccc tcccttgggtg 240
ggcgcggctc ccgggaagcg gtcgtctctg tctccctca caggccgggt tcccgttctg 300
gaccttcgcc ctcggaacac agtgctgttg gccgggactc cttcccaggg tggacggctc 360
cctgtttctca ttctggctc tgccagaact gtaggaagtg ctacgtacac tttagggcat 420
gcatggcact ccctgggaga cagtgttcta gggccagagg aaagatcttc cctgaaggca 480
aacgcccgcg gagcccacaa gtccgggccg cactgaacaa gtcaggatgt tgccatcggc 540
aattctgcag aaggcagtaa cccatctgag agaaagagcc gctgtcataa ggtctcttgc 600
ttgagctgct ggggttgagaa tggagctgga agagggaact gatctcggac tccttgggga 660
tcttggttat gtttgaccct tttactttca gggancangg atgggccacc ganacccca 719

```

<210> 194

<211> 826

<212> DNA

<213> Homo sapiens

<400> 194

```

tttagaatga atagcccttc tgggttttct ttttgacaat tcttggactt gaggtaaaac 60
aaggaggatt gtggccggat ttcagatccc aaagccagcc tccatcttag gcctttgcct 120

```

cattgtgcct tttaggtttt cttaccacc gtctcctgtt ttgtcttttt tttcttttct 180  
 cctaccacct tcttgggaca ttcagaaact gcctgggtgg ttgagaaga gacaaccag 240  
 tttgatctgc aatacaagga tccattcgta atctctctct cactgatgtt attccccat 300  
 ctgccgtctt ggttcatctc accacagaag ggcathtagt cctaccacc catcggtgc 360  
 gtatgacagc aggatggcac ttccatttc tctgtggta gtgctcgagt gaaaacctct 420  
 ttcagctgag tcctctgagg ttctgtgtt gagtcctggg tggctgatgg aatgattgag 480  
 gaggtctggt caccctcaag cgccgtcatc gccttgtttc catgggcttc tgtcacacaa 540  
 aatgaagaac agaaatgtta ggacttaaga gaatgtttgg aattcacacc tctttgcagt 600  
 cctttcaagg ctgctgctct gtgctgtgtc ccatgcatgt gaaagtagag ctgtgatggc 660  
 tgctgggacg cttgcaaaga tcatgtgtga gaattgagca caagaccaca aantattact 720  
 gcttgatgcg cttggtaaaa ctctatctgc caggaaacc aaattttctt ttctttcctt 780  
 ttttttttg agacagggcc cnccttggtg cccaancctg aatnca 826

<210> 195

<211> 737

<212> DNA

<213> Homo sapiens

<400> 195

ttttacttca tgccaacatg agaaaagaca aatcacattt ctttaggaag gaatcctaag 60  
 tgcctagcaa tttggacagg ataaatggag tttgggagaa gagttttgaa gccaatgtt 120  
 acctaaaatt gataaactca ataaacaaga gggttgtgct agcccacaga gatcttatgg 180  
 ggattgactg agattataaa ttcattgagaa agtgattttt aaccacaaa aggctataca 240  
 tatattagta tgttaggtac attcattaca gttagcatac actaatcctg tctttaattt 300  
 acaacttggc cttctccatt caagaatttc tttttttctt ttntttttt ttgctataat 360  
 actattcttt ctttaaccag tagtttattg agaaaaactt taacatgtcc aattttaaaa 420  
 atattaaata ctatggtaat gtgtcctaga atgtcctgtt tgtcatctgt ttctgtttac 480  
 tacctgctca gttccaacag gtatttaaact cagctagaac actgataaag cctattgcag 540  
 ctttctgagt tacctgtagt gagtcaggac aggtagcaga naggggaagga ataaatgtca 600



caaaaaatga ctcatcctaaa accaattttg gtttttagctg caggcagtga cataaatgcc 660  
cagtgccttac tactccagat ttctggttcc ttcttttaac tctgaagttg atggccttata 720  
gnctatagcn aaaacna 737

<210> 196

<211> 824

<212> DNA

<213> Homo sapiens

<400> 196

cattaaaaag cccagctttc ctccatgtta gatgtgactt ggaaaatgag aaagatttag 60  
caaaattcca cegtatcttt tgccaggcta gagacaggga gagcaggga aaaccctcag 120  
gctgctgaaa ttcttaggct gttaggaagc ccctcgaatt ctgtgaaaat gagggtttct 180  
taactcacac tgagagcgga aaggggcaga cccttttcat aactccctca agtgtgtgtt 240  
acctttcttt accagcatgg taagcaacag gacatatccc agcctcggac atgtctgtat 300  
gatccaaggt acccaaagtc agacagagta aactcaagcc tggcactggc ttcttgccgc 360  
ttcatgtgct ttggaaaaag caggagaagc aatagcagca ggagtcccca gcagctggag 420  
ccgcaagaat gaaccgcaaa gaggggaactg acagcagctg cggctgcagg ggcaacgacg 480  
agaagaagat gttgaagtgt gtggtggtgg gggacgggtg cgtggggaaa acctgcctgc 540  
tgatgagcta cgccaacgac gccttcccag aggaatacgt gcccactgtg ttgaccact 600  
atgcagttac tgtgactgtg ggaggcaagc aacacttgct cggactgtat gacaccgcgg 660  
gacaggagga ctacaaccag ctgaggccac tctcctaccc caacacggat gtgtttttga 720  
tctgcttctc tggcgtaacc ctgactntta cccaatgtcc agattgatct ccngatgac 780  
ccaaaaaacc ttggcccgnt tgctggattg aaaagagaaa cctt 824

<210> 197

<211> 880

<212> DNA

<213> Homo sapiens

<400> 197

```

agatatgaca ggtaggctct ttcaggctac agggagaaga cacttttagag aaaatgttag   60
ggagtaatag agtggctttt tcgttttttt gcttctctgc ttatagtatt ttgttttggg  120
agggatggga tctggccttg attttgcaga gacttcttgt gcccagcccg tagtatctac  180
ccaatcagac aaggagccag gaattactgc ttctgctact gatactgata atgctaattg  240
agaggaggta ccacatactc aagagatttc agtgtcttgg gaaggagaag ctgcccctga  300
gataaggaca tctaagttag gccagccaga tcctgcaccc tctaagaaga aatccaatag  360
actcacctta agcaaaagaa agaaggaagc tcaagatgag aagggtggaga aaactcaagg  420
tgacatgag cacagacagg aagaccgact aaagaaaaca gttcaggatc attctcagat  480
cagggaccag cacaaggag agataagtgg ttttgggtcaa tgtctggtct ggggtccagt  540
ttccttccca aactgtggga aatggaggcg gctgtgtggg aacattgacc cctcagttct  600
cccagataat tggctcctgtg atcagaacac agatgtgcag tataatcgct gtgatattcc  660
tgaggagacc tggacagggc ttgagagtga tgtggcctat gcctnctaca ttccaggatc  720
catcatctgg gccaagcaat acnggtaccc ctgggtggcca ggcatgatag aatctgatcc  780
tgacttaagg ggaatatatt ctttttactt tccatcttga ttccctgccg ctaagtacca  840
tgtgaccgtt tttgganaaa cagtttntng tcatggatcc                        880

```

<210> 198

<211> 874

<212> DNA

<213> Homo sapiens

<400> 198

```

agagctcact ctccaacttt attaaatact atttgagcac aggacacatt cttaaacatt   60
ttgaaaaaca ttaaccaag atgtagaggc tactgctagt cgtcattcta gaatctgata  120
ttttactctg tatttgaaat gaatgattaa tgtcctagga aattagcttt agcagatgtc  180
cagggtgccac atcaaaaaag tgcaataatt attgacagtt ttttagatta ggcatattat  240
tggaanaaaa ctttataaag agtgaacatt gtatactcta gtaaaacagc atcactttaa  300

```

aaatattcat ttatgaaatc tgttacctat agttgaagtc ttgagtagtg aacaaggac 360  
 tctaatacca atactcttaa tatctggcta ttttagatcc cttaaagggc ataattattg 420  
 gaaatttagg tatttacta aagcatgtat ataattattgc caacaagaaa agtaaactctg 480  
 aagattaagg gaacttactt ctgcaaactg tcttgcgata gttaagcaga atttaaactc 540  
 tgttttaagc aggaaaccag aaagattatt ttgcagttgt agaagatttc ataacttatt 600  
 aaaacttatt aacattttgt gttgtttaga tataggcagt tgatacatac taacatccca 660  
 gccttttcaa tatcagggtt aaattatagg aaaactcagt aaaatgggtca aatctgaaag 720  
 tttgatggta gaaactgaag atttaacaga gaactgtgtt ttacccgagt gccaaaaatg 780  
 ctgtgagcct ncttgcacaa aatttatacc actttgcatt tttatctatc agtccagatg 840  
 gtggctccct tcttntccag gacctttcac cata 874

<210> 199

<211> 877

<212> DNA

<213> Homo sapiens

<400> 199

gaagactgcg cgtttgagtg tccctggcaa cgccacgctt ccgccttctg gaagcctgca 60  
 ctccagcttc gagtggaacg atgcctctgg aggtgggtgg ggagctgcag atccgggcga 120  
 tttcttgccc aggagtgttc ctgcctggca aacaagatgt gtacctcggg gtctacctca 180  
 tgaatcagta cctggagacc aacagctttc cctctgcgtt cccattatg attcaggaga 240  
 gcatgagatt tgaaaaggta tttgaaagtg cagtagatcc tggagctgta gtagaccttt 300  
 tggaaatgtg ggatgagttg gcctactacg aagaaaacac acgagatttt cttttcccag 360  
 agcccaagct gacaccttcg caccctagga ggtgtaggga ggtgctcatg aagacggctc 420  
 tgggttttcc aggcatgtgt cccaaaatag agttttctac aaggacagcc atcagagaat 480  
 gtgtgtttct gcatagaaac agatttcttg gctggggaaa caaagggaag atgttggttc 540  
 agcaagaaca cagaagctta aagaagaaac tgaacagaaa tgggaccag acctctggag 600  
 aagggtgtgt ttcctggatg ctcttcagg aattcgaagg aagaaagaca tgagtcacgg 660  
 aggctttat ctacatcaca tgaaccaata tttcccttaa atactatnaa gatgaaacta 720

aaggagaata atctcaacag actggccaaa ngcatgcaag cccnggcgcc cttttagtat 780  
tctaccagca tttctttcag gaccagccag ttcanttgac ctiggaataa ttcaaaatct 840  
tggaggaagc aagcctcctt tgtgtanacc ntgaccc 877

<210> 200

<211> 840

<212> DNA

<213> Homo sapiens

<400> 200

caaaaagaac aacctgtttg ttgttgaccg atctgacaag ttggggcgtg tgcaggagtt 60  
caatagtggc cttctgcact ggcagctcgg cgggggtgac accaccgagc acattcagac 120  
tcactttgag agcaagatgg aaattcctcc tcgcaggcgc ccacctcccc ccttaagctc 180  
cgcaggtaga aagaaagagc aagaaggcaa aggcgactct gaagagcagc aagagaaaag 240  
catcatagca accatcgatg acgtcctctc tgctcggcca ggggcattgc ctgaagacgc 300  
aaaccctggg ccccagaccg aaagcagtaa gtttcctttt ggtatccagc aagccaaaag 360  
tcaccggaac atcaagctgc tggaggacga gccagaggagc cgagacgaga ctctctgtg 420  
taccatcgcg cactggcagg actcgctggc taagcgatgc atctgtgtgc ccaatattgt 480  
ccgtagcttg tcattcgtgc ctggcaatga tgccgaaatg tccaaacatc caggcctggt 540  
gctgatcctg gggaagctga ttcttcttca ccacgagcat ccagagagaa agcgagcacc 600  
gcagacctat gagaaagagg aggatgagga caaggggggtg gcctgcagca aagatgagtg 660  
gtggtgggac tgcctcgagg tcttgaggga taacacgttg gtcacgttg ccaacatttn 720  
cgggcagcta gacttgctg ctttcacgga aagcatctgc ttgccaattt tggatggctt 780  
ggttgcactt ggatggtgtg cccgtctgca tangcncaag atccttttcc actgngggga 840

<210> 201

<211> 674

<212> DNA

<213> Homo sapiens

<400> 201

```

agtgtctgagc tgttttgaca acttggaccc cgggtcctct gtgggtagga aaatcagctc 60
cctcttttgct cctctggggc agctgcacct cgggccagct ttctgcctgt ctgcctgccg 120
gcactgctgg gtcgctgtac ccaaacgcac agccggtgcc ccgtgctaga aggtcttcag 180
tttccagaag aaccaaagca tctttggacc tacctaggga aggacctgcc tgtgaccttt 240
gccctgtcct ggaggggtcca gctttgggct gaatggcagc acccagctg ggccgtctgg 300
tgctgaccca cctgctgggtg gccctttttg gcatgggctc ctgggctgct gtgaacggga 360
tctgggtgga gctgcctgtg gtggtaaaag acctccaga gggttggagc ctcccccat 420
acctctctgt ggttgtggcg ctgggaaacc tgggtctgct ggtggtgacc ctgtggaggc 480
ggctggcccc gggcaagggc gagcaggctc ccatccaggt ggtacagggtg ctgagtgtag 540
tgggcacagc cctgctggcc cctctgtggc accacgtggc cccagtggca gggcagctnc 600
actctnggc cttctaactc tggccttggg gntggcaatg gcctgttgta cctctaatgt 660
actttcctgc cctt 674

```

<210> 202

<211> 691

<212> DNA

<213> Homo sapiens

<400> 202

```

taattttctt agtaaaaaga ataacagaat gcatcgtggc aatccttaag caacattatc 60
tatgtggact gcttaaatca gcaaaacacc agaagtttgg ttaacttggg caatatgaca 120
agtattactt tttgggcaaa actactcatt aagcaatttc tctagtgtgt cggacacaaa 180
taggttcttt atttttggca tgtatgcctt tttattttca ttcaattttt tttttttctc 240
agacagacat agtagtaacg actagcattg gaaaatacat atcactattc ttggaatatt 300
tatggtcagt ctacttttta gtagaatatt tttggatagc gttgacacga tagatcttat 360
tccatacttc tttattattg ataattttat tttcattttt tgctttcatt attatacata 420
ttttgggtgga gaagagggtg ggcttttttg aaagagacaa aaatttatta taacactaaa 480

```

cactcctttt ttgacatatt aaagccttta ttccatctct caagatatat tataaaattt 540  
 attttttttaa ttttaagattt ctgaattatt ttatcttaaa ttgtgatttt aagcgagcta 600  
 ttatggtagc gaactttttt taatgaggaa ttcatgatg atttangaat tttctctctt 660  
 ggaaaaggct tncctgnga tgaaaatgat g 691

<210> 203

<211> 714

<212> DNA

<213> Homo sapiens

<400> 203

gttttcattt ctaaagcta atcctttttc tttcttcctg tctatgagta ggaactctct 60  
 ctccatccct gtagaatctc ttggacatgt ttatctcatg cttatgggggt cccattttct 120  
 tggagtggga ttgacattgg tggattctgc ttcagtgtat ccttcttgcg gtcttatttg 180  
 catgcatgag tcaactgtgt gcatcccat gtgctttccc caggccagtc tctcatgccc 240  
 attccatttc ccctgcccta taggcctcct ttcatgtact ctgccaacg gttttggggg 300  
 acaatctggg ccagaagggg agcgcagctt ggcacccct gatgccagca tcctcatcag 360  
 caatgtgtgc agcatcgggg accatgtggc ccaggagctt tttcagggt cagatttggg 420  
 catggcagaa gaggcagaga ggcctgggga gaaagccggc cagcacagcc ccctgcgaga 480  
 ggagcatgtg acctgcgtac agagcatctt ggacgaattc cttcaaact atggcagcct 540  
 catacccctc agcactgatg aggtagtaga gaagctggag gacattttcc agcaggagtt 600  
 ttccaccctt tccaggtgag gcttgaaagc cctccttgaa agaagggtg gggccttggg 660  
 gatgtggaga gaatactgct gccttttctt ncatanggct gtagttgggg anga 714

<210> 204

<211> 724

<212> DNA

<213> Homo sapiens

<400> 204

```

ataggcgacc ctaatgggtt ttgtgagatg tctgattaag tctgtggtcc atagagtaat 60
gcccttcgct gtcagggaat gcaagggaag agcagggaat tccagaatgg gaagggtgtgt 120
gaatgtagac cttcaggttg gtcacaaaca gtgtctcgag attccactgg ggaagcgttc 180
acttttagaa tcaggccaag ctgagggttc tctgtcctca ggtattttcc tttgtagcag 240
tactggctc gaaatggaga atgagagaaa aaggagcttg tttcaggcca gagacctcac 300
taaccgaata acaacactaa ggccctgcag cagggggcac aaactacca gcctgtttcc 360
gtgtggccta tgatggtttt tttgtttgtt tgtttacatt ttttaatggt tggaaaaaat 420
caaaagaggc atatctacct attcataac atgataatta taggaaattc aaatgtgggt 480
gactataaag ctttattgga acacaggcac gccattcgt tcctgtattg tctatcactg 540
cttttgtgct gcgatgacag aggctgcatg tggcctgcaa agccccaat ttttatcatc 600
cagcccttta cagaaagagt ttgctggtcc ctctcataaa gtatcctttt ttttaaagt 660
gacagagtct agctctgntg cccagctgga ntgcattggcg cnatctcgct tactgaaacc 720
tctg 724

```

<210> 205

<211> 853

<212> DNA

<213> Homo sapiens

<400> 205

```

aggatttctt cctgggtgcag aagctggtga gctgggctct gtttcagggc aaatgagggc 60
caggagctgc ctgtgtgact ttggggctcc ctctgccagt gaccaatccc tcttaaaaag 120
cagtcaggtc aatgctactg agtagcctca gagagaattt cctaaacaat acaagaaaga 180
gaaagatagg tctcttttcc cttttggttc taagcatcct ttcctcactt cagggtaggg 240
tgccaagct ctggggcttc aatccagaag gaggcctaag tgggcatcag acttaaaata 300
ggcaggagga agatgcggag gaggtggca agtagagggt agccattccc cagaggaaga 360
tgcaggggga gggcacctg ggggaaggc cactgagagc cagcaagtgc ctgcggagct 420
gacctggggg cctctgcca cttcctttga cccagagttg cttccagta actcagctgt 480

```

tcaagccac attccctaga tttatcttgt cctctctcca tattcttctg gaaaagcaga 540  
 tgctctgcta atccaaggaa ttgcatcttt ccagccctgt ctcacaaaat ctgggctgtg 600  
 gggagagaga attgtgtgga ctgccaaggg aaaagagttt ttaaaaagag catgcccttt 660  
 cctcttggga ttgtagattg nattgggaac agccctgggg actagacaaa gtgctgatga 720  
 tgaattccct acaaggccct gttgtgaaga agtcctttgc tgggtttaat aacacctatt 780  
 ccctgattgg gcaatcttgc nggaagtcca cccccgtgaa attacggagc gcccctaagn 840  
 ctaatgaaat gac 853

<210> 206

<211> 861

<212> DNA

<213> Homo sapiens

<400> 206

gaggtcagaa gataaccaga aaaataccat tacaagcaaa gaaaattaca gaccaatatt 60  
 catcataaat gtgcaaaaat tataaactaa attttagcca aatttaatga tttatacaca 120  
 tacatgctta cacacatgga cacacacacg tatectttac atgcaggtat aaagaataat 180  
 attaatacat aatgaccaag tgtgtatccc aggttggta acattcagaa atttgtcaat 240  
 ctaattcact acattaataa actgaaaaaa atcacatgat tatctcaata gatacagaag 300  
 aagcacttaa caaagtccat tattttattcc tagtaaaaat tatcagtaaa ataagaacag 360  
 ttgagatttt cctcaaactg ataagaggaa tccatgaaaa cctacagctg tcataactaa 420  
 tgggtgaaaca gtgaatgctt tgtgcctacg atcaggatca aatcaaagat gtcttcattc 480  
 atgtcttctt tcaccattgt acttgaaaaa gaataaaaga catccagagt ggaaaggaag 540  
 aagtgcact atcttaattc atggacaaca tgaccattgt agaaaatctg atagaatcta 600  
 caaaaaaagc tattagaact agtaaacatc aaaaaattta aaatacatag ggataaatct 660  
 ggtataaaga tgtgaaagac ctgtgtgcta aacactgcaa agcattccag agagaaatta 720  
 aagaggccta ataaatggag aacacttttg tcatggttgg aagatcctat tcagattcag 780  
 tctcctaatt atcttcatct ataattagca nttcaaaatg actgcaaccg tcaatcttga 840  
 tcagactgct cttgaangtt t 861



<210> 207

<211> 723

<212> DNA

<213> Homo sapiens

<400> 207

```

acagcggggc gtcacctcgg acatacgaac agcgggcggt gttcccggct ccgtggggcc 60
gtcttcccgg cgagtcgcg acggtcgcg cccacggcga gatgaaatct cgctctgtcg 120
cccaggctgg aatgcagtgg cgtgatctcg gatcactgca gcctctgcct cccgggttcg 180
ggcgattctc ctgcctcggc ctctgagta gctgggatta caggtgcgtg ccaccacgca 240
cggctaattt ttgtattttt agttgagacg gggtttcacc atgttggtca ggctgttctt 300
gaactcctga cctcgtgatc cgcccgcctc ggccctcccag agtgctggga ttacaggca 360
tgagccaccg cgcccggcct gttttttttt tgttggttg ttttgagac ggagtctcgc 420
tctgtcgccc agcctggagt gcagtggcgc catctccgct cactgcaagc tccgcctccc 480
gggttcacgc cattttcctg ccgcagcctc ccgtgtggct gggaactacag gcgcccgcg 540
gcacgcccgt caaatTTTTT tttttttttt tgnatttttt ggtagtgacg ggtttaccat 600
gttggccagg atggtctcga tctcctgacc tcgngatccg ccgctttgtc tccaaagagc 660
tgggattaca ggcgtgagac accgngccct gtccggcctg gtattatcat atgantgata 720
tct 723

```

<210> 208

<211> 833

<212> DNA

<213> Homo sapiens

<400> 208

```

ttttaaggag atgcctacat agaagagtga cagcagctag actaaatgtt taactgctga 60
actagttcct caggtatcct ggctctagag attgctatgg gagattggat gactgttaca 120

```

gatccaggtc tgtcttcaga aagcaaaact atctctcaat atacctcaga aacaaagatg 180  
 tctccatcaa gtttatactc acagcaagtg ctatgttctt caataccttt atcgaaaaat 240  
 gtgcacagtt ttttcagtgc cttctgcaca gaagataata ttgaacagag tatctcatat 300  
 cttgatcagg taacatgttt ttgtaaaaaa cagtagcata aatcatgtta tataatagaa 360  
 tgtatcaaaa ttatgagaaa aacatttgtc aaacacaagt ttgttggtta tgtagtgccc 420  
 ctgagactta gattttcaga gaaccttggg gattatctca tctagagata gcaagtctaa 480  
 cttttttgtg tggagcacct tggcctctc attgtcccag gggctcctcc actgagagtc 540  
 cagccatcac tttatggatg cagaaacca agtgccttgc tccatgtcac agatttatag 600  
 cagagactaa aagagccccg tcctcttaac tctttgncct ttgggatatt gaccattttc 660  
 ttaactatit caaggatagn tttctatit tctaaggaaa gatttctatc ttttgattit 720  
 ttttttacta agttgnccag taaccacctt ttaaaataat cacatttatt ttttaattit 780  
 gacaaaatit ntatatttg catgtcacat aaggatcatat cacantggga atg 833

<210> 209

<211> 756

<212> DNA

<213> Homo sapiens

<400> 209

agatgcggtg gtggccgccc agcgcctgga aggagctgct ggacaggccg agggagcctc 60  
 cgcccagagac cgcgcagccg ccgcccgcct ggctacaaaa gacccacag ctgtagagag 120  
 agcaaacttg ttaaactatg ctactatgag tatcaaagga ctcatggaat ctgctctgag 180  
 ctttgccgc actttggatt ctgactatcc ccccttgcag caattcttg ttgttatgga 240  
 acattgcctg aaacacggtc ttaaagtaag aaaatcattt ttgagttaca acaaaacat 300  
 ctggggccct ttggaactgg tggagaagct gtaccccgaa gcagaggaaa taggagctag 360  
 tgtccgggat ctacctggtc tgaagacccc tctgggtcga gcaagagcgt ggcttcgatt 420  
 agccctcatg cagaaaaaaa tggccgatta cttacgttgc ttaattattc agagggatct 480  
 cttgagttag ttttatgagt atcacgcact aatgatggaa gaagaaggag cagtaattgt 540  
 tgggctgctg gttggcctga atgtgatcga tgctaacttg tgtgtgaagg gagaggattt 600

agactcacga gttggagtga ttgatttttc tatgtattta aagaatgaag aagatattgg 660  
 aaataaagaa aggtatgatt ttcataagnt atttcacata ttgggggtttt ttatatagct 720  
 ctttaciaaat cattntngga tccatctatt tacaag 756

<210> 210

<211> 692

<212> DNA

<213> Homo sapiens

<400> 210

caaagaagcg gagaaagagc taccggagct tcttacctga gaagagtggc taccctgaca 60  
 tcggcttccc cctcttccca ctttccaagg gtttcatcaa gagcatccgg ggtgtcctga 120  
 cgcagttccg ggctgccctg ctagaggcag gcatgccgga atgcacagag gacaagtagc 180  
 tgccaggcac agaggaaaga gcatcacctg gggagaggcc agccgccgcc tgctcactcc 240  
 cccccggaat caccctctt cccatgcccc tctgtcccca ctgcaaacc actgccctct 300  
 tctccccaag gtgagttcga tgctgaagtg caagaagtgt gttgagatgc tgccgtttct 360  
 attttgaagc gagctttcaa caggcgggtc ccctgtggca aagaaaatcg gaaccctggt 420  
 gccgattttc catttgtcac ccagcagaa tgtccggcac ttgtccctt gctgccccct 480  
 ctcaggtcag aggcgggtgt tccagggcct gccgcggggc tctctgggcc ggttccctgc 540  
 agaccgcag gagagcacat gtgccttgca tgaagtgtgg gttgcgcaa caattccctg 600  
 gtccctttca acctgtttag ttcaacttaa gccttctgt gtccanacc tctgtgcac 660  
 caccaccan gnccttcta gtccttcage gt 692

<210> 211

<211> 815

<212> DNA

<213> Homo sapiens

<400> 211

tctaaaattc tcgctaccag cacagcagtc tgaagtcaaa ctaggaggat caagcttggc 60  
 gtggggaagg gcgtctgcc a ttactgaggc ttgttttccc ctgacagcgc taaaaaggcc 120  
 tggaagttcg gactgggtgg agctcaacac agtgtggcaa agtggctgca gccagactgc 180  
 ctctctagat tcctcttcac tgggaagggc atctctgaaa gaaaggcacc agccccagtc 240  
 aaggggttat agataaaact cccatctcac tggaccagcg tatctggggg aaggggcggc 300  
 tgtgggcaca acttcagcgg actttaaacg ttctgcctg ctgactctga agagagcagc 360  
 agatcctgac aaggagggtc ctcccagcac agcgcttgag ctctgctaag ggacagactg 420  
 cctcctcaac tgggtccctg acctccatac ctctgatgg ggagagacct cccaacagcg 480  
 attgtcagac acctcatgca ggagagctct ggctggcatc agcctgggtgc ccctctggga 540  
 caaagcttcc agaagaagga gcaacagcaa tctttgctgt tctgcagcct acactagtaa 600  
 taccaggca cataaggtct ggaatggacc tncagcaaac tgcagcagac ctgcagaaga 660  
 cggcatgact ggtagaagaa aaagtacaaa cagaaagcag tacatcatca acataaggaa 720  
 ccccatata gaaacacat ncaaagatca aaggtaggta aatccataaa gatgaggacc 780  
 aaacagccaa aaaccctgna aatttccaaa ancca 815

<210> 212

<211> 808

<212> DNA

<213> Homo sapiens

<400> 212

ttttaaatat gtggggagat acataaagaa cattgcttat ttgttcttga aaataacagt 60  
 gattcaaata tttcattcag atttacctat gcctaataa aaaaatgatg cagaacttga 120  
 ttctccacct tcaaagaaaa aaagattagg tttttccag acttatgata cagaatattt 180  
 aaaagttagt ttattatct gtcctggatc aaaagaaagt tcaccaaggc cacagtgtgt 240  
 catttgtgga gagatcttat ccagtgaata catgaagcca gcaaatcttt ctcatcattt 300  
 gaagacaaaa cattcagaat tagaaaacaa accagtagat tttttgaac aaaaatcttt 360  
 agaaatggaa tgtcaaaata gttctttaaa aaagtgttta ctagttgaaa agtcacttgt 420  
 gaaagcttct tatttaattg ctttccaaac tgctgcaagc aagaagccat tctccattgc 480

tgaagaatta attaaacat atttagtaga aatgtgttca gaagtttttg gttcaagtgc 540  
 tggagacaaa atgaaaacta ttccactttc taatgttaca attcaacaca ggattgatga 600  
 actatctgca gacattgaag accagctgat tcaaaaggct agagagtcaa agtggtttgc 660  
 ccttcagata gatgagtcac cagaaatctc aaatatcaca cttctttttg gctatatctg 720  
 nttcattgat tatgattggc cngatgtaa aagaagaatt attantttgc attgaaatgc 780  
 ctacttcaaa tactgggctt tggaaaaa 808

<210> 213

<211> 703

<212> DNA

<213> Homo sapiens

<400> 213

gttaagaagc ttctgcagg gggtagaaaa ttggactcaa tgcctcctg aaaagttcag 60  
 ctacagaaag gctgggtccc ttgtgtacac tctcacctt gatccttagc accgttgta 120  
 agtatactga ttaatccaat cagtaagggc ctgcggagt agctgggctc tggagtagat 180  
 gtgattcaag acagaaaagc aggagggtac gccactcaga tctcaaggca cttaggatcc 240  
 agttaaaggc actattaaga cattatcagc tgaagagtca gactgacctt agtttaaata 300  
 tgggctgagc cacaactaga ccaggctttc tcaacttcgg caccctgac tttttttgt 360  
 gtgtgtgaaa tggagtctca tctgtctccc aggctggagt gcagtgggtg gatctcggct 420  
 cactgcaagc tctgcctccc aggtttatgc cattctcctg ccttagcctc ctgagtaact 480  
 gggacaatag gcgtccgcca ccacgcctgg ctaatttttt gtatttttag tagagatggg 540  
 atttcaccgt gtttaaccagg gtggtctcga tctctgacc tcatgatccg ccgcctcggc 600  
 ctcccaaagt gttgggatta caggcgtgag cctctgtgcc agcctttttg ntttttttt 660  
 ttttgagac agggctctggn tctattgccc angctggaat gca 703

<210> 214

<211> 758

<212> DNA

<213> Homo sapiens

<400> 214

```

ttctagtaat gtaggaacac ttccatctaa gccgccattt cgatttggtc aaccttctct 60
ttttggacaa aacagtacct tatctgggaa gagctcggga ttttcacagg tatccagctt 120
tccagcgtct tctggagtaa gtcattcctc ttcagtgcaa acattagggt tcacccaaac 180
ctcaagtgtt ggaccctttt ctggacttga gcacacttcc acctttgttg ctacctctgg 240
gccttcaagt tcatctgtgc tgggaaacac aggatttagt tttaaatcac ccaccagtgt 300
tggggctttc ccaagcactt ctgcttttgg acaagaagct ggagaaatag tgaactctgg 360
ttttgggaaa acagaattca gctttaaac tctggaaaat gcagtgttca aaccaatact 420
gggggctgaa tctgagccag agaaaacca gagccaaatt gcttctgggt tttttacatt 480
ttcccacca attagtagtg cacctggagg cctggcccct ttctcttttc ctcaagtaac 540
aagtagttca gctaccactt caaatTTTtac cttttcaaaa cctgttagta gtagtaattc 600
attatctgcc tttacccttg ctttgtcaaa ccaaaatgta gaggaagaga agagaggacc 660
taagtcaata tttggaagtt ctaataatag cttcagtagc ttccctgnat catctgcggn 720
tttgggcgaa cctttncagg ctagcaaagc aggtgtca 758

```

<210> 215

<211> 910

<212> DNA

<213> Homo sapiens

<400> 215

```

accaaactgc tgttctggaa tatgctcgca ttgaaaacta gaactgccac cctattttaat 60
actacatctg ccaactgccc ttcaaattta ggtagatgt catttgtgat tatcagagcc 120
tttgatctct catttctatt aagaaacctg aaagacatct aatcatttaa atacattctt 180
cctagattgc tggaacttac ggtagttata aatcctttca aatgtctgat accaagagca 240
actaactctt acccttaaaa ctaaaaagga ggtcttttta gaagggaaaa aatgaaggca 300
aggagcagaa aagacctcag ggtcactata tacacaacat ggaagaacca gggattagcg 360

```

ccaaagtgg ctttgtactg tgtcctttat ctctttctac cagacccaac gcagctggct 420  
gacatttgac aaacaaaatg ctgcctcttt atttctctgc ctttggcata tttctgattt 480  
tctattatcc tctcctccat taggacattg tagttcagct tgactttaga ttagaaacag 540  
acttgtacag gtatagtata cttatgaggg cctgagaaga ataatgtctg agaatcattc 600  
attcacttaa ctcatgttta ttaaatttgt ctgctatgtg ccaggcatca ttctaggtgc 660  
tgagaataca gtagtgagtc cccaaagtcc ccagcttcta ggaaaggaga aagacaacga 720  
acgataacaa atagacatgt aaatacctgg caatgctaag tgctttgcag acaaattattg 780  
caaattggagg gaggtgata tttagttagg gagttgaacc ttctctgnag agatgcctta 840  
gagcaaagan cangatggac cgagggacca acctgggaat tttgggcttc ctttttaact 900  
ggccctaaag 910

<210> 216

<211> 457

<212> DNA

<213> Homo sapiens

<400> 216

aaggaaatgc agattaaaac ccatttctca cccatcagat tgtcaggggc ctaagagttt 60  
agtaacaaac tctgtgatgg ggctataagg aaatggtgat acttagatat ttctggcagg 120  
agattaaatt gttataatcc gggtagggcat ggtggcttat gcctgtaatc ccagcacttt 180  
gggaggccga agtgtgcaga tcacctgagg tcatgagttc gagaccagcc tggccaacat 240  
ggtgaaactc tatctctact aaaaatacaa aaattagaca ggcgtggtgg tgcactcctc 300  
taatcccagc tactcgggag gctgagacag aagaatcgct tgaacctggg agatgaaggt 360  
tgcagtgagc tgagatcatt ccactgcact ccagcctggg cgacagcgag actctgtctc 420  
aaaaaaaaa ggacaaagga aaggaggggg gaggnnn 457

<210> 217

<211> 813

<212> DNA

<213> Homo sapiens

<400> 217

```

taattaatta attaaaaaaa aaggccaggc acagtggctc acgcctgtaa tcccagcact   60
ttggcaggcc aaggcaggcg gatcacaagg tcaggagatc gagaccatcc tgactaacac   120
agtgaacccc cgtctctact aaaaatacaa aaaaattagc caggcgtggt ggcgtgcgtc   180
tgtagttcca gctgctgggg aggctgaggc aggagaatgg cgtgaacccg ggaggcggag   240
cttgacgtga gccgagatcg caccactgca ctccagcctg gtcgacagag caagactgca   300
tctcaaaaaa gaaaaaaagg agaaaaggag gcgggctgca ttgaccctgt cagagagctt   360
gcagccattg aggctgcccc atccttgggt gctcttgtgt ggggtgtggac acaaggaccc   420
caccagcgc acagccctct gacctctgct cacttgcccc agtgtcccca gttgtcctca   480
tccaggggtc tattcgagtc cagcctgaag ggccggctcc ctctctacca cggcctgaga   540
ggaagagcat cgttcccgt cctatgcctg gaaactcctg cccgcctgaa gtggatgcaa   600
agctgctgaa gcggcagcag cgaatgatca agaaccggga gtcagcctgc cagtcccgga   660
gaaagaagaa agagtatctg canggactgg aagctcggct tgcaagcagt actggctgac   720
aaccagcagc ttcgccgana gaatgctgcc ttcgcggcgg ntggaggcct gctgctgaaa   780
acacgagcta anttagggtc tggaaacagg aag                                     813

```

<210> 218

<211> 812

<212> DNA

<213> Homo sapiens

<400> 218

```

aaattagaac tcaagattaa aaagcccact caaaaccaca caactacatg gaaattgagc   60
aatctgctcc tgaatgaatg actcctgggt aaataatgac attaaggcag aaatcaagaa   120
gttctttgaa atcaatgaga acaaagaaac aatgtatcag aacctctggg atgcaggtaa   180
agcagtgtta agaaggaaat ttatagcact aaatacccac ataaaaaatc tagaaagatc   240
tcgaattgac accctaacat cacaactaaa agaactagag aatgaagagc aaacaaatcc   300

```



cagagctagc agaagacaag aagtaactaa gctcagagtg gaactgaagg agataagagt 360  
 catgaaaaac ccttccaaaa aaatcaatgc atcccgtagc tgtttttttt ttaaaatcaa 420  
 tgaaatagac caccagcgag actaataaag aagaaaagag agaagatttc aaataaacac 480  
 catcagaaac gataaagggg ataccactac tgacgccaca gaaatacaac caaccatcag 540  
 ataataccat aagcacctct atgcaaataa actggaaaat ctagaagaat ggataaattc 600  
 ctgcactcat aaacacccta caaagactga accaggaaga agttgaatcc ctgaatagac 660  
 caatacaagt cctgaaattg agcagtaata aatggcctcc aatcaaaaaa agcccagctc 720  
 cgatggattt acagctgatt caccagangc acaagaggcc tggaccattt gaacgattcc 780  
 aacattaaaa ngagagtant cctaccatta tg 812

<210> 219

<211> 769

<212> DNA

<213> Homo sapiens

<400> 219

gtatgttttc ttgtaagggc tttatagttt tagctcttat atttggtttt tggctctat 60  
 tgagttaatt tttgaatatg gagcaaagta aagcttttga aaactaacag atgtgcaaaa 120  
 ttatttttaa tttttgaata tggagcaaag taaaactttt gaaaactaat agagatttgc 180  
 aaaattat 120  
 tctttctgat tttaaatgct tttaaattag ataaattata tatagttcaa 240  
 tgttatttct tcattgatat attactagaa atgaatgtct ggcaaagcat aagcaataac 300  
 atctcataag aagaggagga atactgacta atactgtata gtaatacaaa gttttgaggg 360  
 gcaaagagat attctcttgt tttaaataaa agttaccag agtcattgga tactctcttt 420  
 tctcttatgc attgattttg gccttagcaa atatggtaaa tttcttaaag tgtgaatact 480  
 cttgaactaa agtaataatt atcaacttag taagagtttt gttaagtggg gaaacttttc 540  
 ttcctcaata ttaattacta attcctgaat gataactaaa tatttcaatt agtagttcct 600  
 agcaaaggta gaattacaac acagtttggg aaatgctaag tagagagtcc cacagtctgg 660  
 atctgatgat accgattatg taactcanc atttaccct gagtatggat tggcataact 720  
 tgatcatgat agatggcatt ttttttattg ggggagaata aatntnaaa 769

<210> 220

<211> 695

<212> DNA

<213> Homo sapiens

<400> 220

```

taaaggactg tatctttggt acactggaga accaaatgat gcccttcgac attttaataa   60
agctcggaaa gatcgtgact ggggccaaaa tgccctttat aatatgatag agatctgttt  120
gaatccagat aatgaaactg ttggaggtga agtatttgaa aacctggatg gagacctggg  180
taattcaact gagaagcaag aatctgtgca actggcagta agaacagcag aaaaacttct  240
taaggaacta aaacctcaga ctgttcaggg tcacgtacag cttcgcataa tggaaaacta  300
ttgcttaatg gctaccaaac agaaatctaa tgttgaacaa gcattaaata ccttcactga  360
aatagcagca tctgagaagg agcatatccc agcgctcttg ggaatggcaa cggcttatat  420
gatcttgaaa cagactccac gagccagaaa ccagctgaag cgtattgcga aaatggattg  480
gaatgctatt gatgctgaag agtttgagaa gagttggctg ctacttgctg atatttacat  540
tcaatcagca aaatatgaca tggcagaaga cctgttaaaa cggcgcctgc gtcataatag  600
atcttgctgc aaagcttatg aatatatggg atacattatg gaaaaagagc aagcatattc  660
agatgctgnc ttgaactatg anatggcatg gnaat                                695

```

<210> 221

<211> 706

<212> DNA

<213> Homo sapiens

<400> 221

```

aacaaagggc cgcgggcggc gggcagtggg gtcccagtct cccggtgctt ccctgaggct   60
gaggcgcccg gcctcccgcc cgccgcgctc cagatgaagt gtgagcactg cacgcgcaag  120
gaatgtagta agaaaacaaa aactgatgac caagagaatg tgcagccga tgcaccgagt  180

```

ccagcccagg aaaatggaga gaagggagaa ttccacaagt tggctgatgc caagatatatt 240  
 ttgagcgact gcctggcatg tgacagctgt atgactgcag aggaaggagt ccaactttcc 300  
 cagcaaaatg ccaaggactt cttccgcgtt ctgaacctta acaagaaatg tgataacctca 360  
 aagcacaaag tgctggtagt gtctgtgtgt cctcaatctt tgccttatatt tgctgctaaa 420  
 ttcaacctca gtgtaactga tgcattccaga agactctgtg gtttcctcaa aagtcttggg 480  
 gtgcactatg tatttgatac gacgatagct gcggatttta gtatcctgga gagtcaaaaa 540  
 gaattcgtgc gtcgctatcg ccagcacagt gaggaggaac gcaccctgcc atgctgacct 600  
 ctgctgtcct ggctgggtcc gatacgccga gcgggtgtct ggtcgnccca tcaactgncca 660  
 cctntgcacc ggcaagtccc ccacaggtca tgggctcttt ggtgaa 706

<210> 222

<211> 817

<212> DNA

<213> Homo sapiens

<400> 222

tgttttagtat gaaaagtatg ttttcatttt gcagatcctt ttctctctgc tccataaaat 60  
 gttataaaaa acattctctt tatttctgtt aattttgata gtatgctact gtactaaagc 120  
 tgaacaatat aagtattgtc ctttctgttt atagacatgt ataggacacc ttcagcaggc 180  
 aaggccttat cctagggcca ggaatgtgaa gatgaatgag ctaaccaagc cccacctcgc 240  
 tgcccacaat gggggccaccg ctactacta agtctaagcc ctgagagatt tgccttggta 300  
 ttaagaaatg catcagaggc atgcctaact tgaaccaaag caagcatctg ttcttatitta 360  
 aacctagtaa ttgtttcttt acaaattgtg gagaaactta ggacaaatga acctcaaact 420  
 agatggtttg gagcaaatag catggaagta atttgaagac catattctct tcattgtcac 480  
 attgacattc accctgtaaa atcatgatac tcttttctgc catagaacca tttcttaaat 540  
 tcgcatttca tgattgtaag gtggtggtct cactgacact tgtcatggtg ggttggtgga 600  
 gaggaccggg ggtgggaatc acggcagacc cagtctgtct gcaacagcgg agcctttgga 660  
 ggggtgctcaa ggaaacactg gtagaaatgg anggaccaac tgaaggaaaa ttttgaattc 720  
 aaaattgaag agtttgnntc tgggttccca taatatgctt gataggagaa gcaacctttg 780

naactggctg ggaaatcgga atacatnttg gaggtct

817

<210> 223

<211> 747

<212> DNA

<213> Homo sapiens

<400> 223

attgattcat ttaatctgca tgttggcggg gtgaatagta gaaaactcac agttgaaaat 60  
gcctcttgtc agccacggag cgcacaggca tttgtgtgcg taaccccggg tagcggtcat 120  
gtgcacctaa agtgtgacga cagcctatgg gaaaccaagg gaagggtcac ctgtagaggt 180  
ccggacattc ggttttgcct ttaagacaac tattanatcc taagcgactg tgttgtggct 240  
gagttaaaaa tgtgcctgtt tacttgcaga gcttcttcca ttaggtgaac aatctgttgt 300  
gattttaatg tgtaagacct ttggtaatgt gaggaattga ttagatagtg cagcccagtc 360  
tctagaggat cagatctgtg ggattggttg ggggtggttg gcaaagtcca tggtagagta 420  
nnaaatgact ttggaagtga ctctaattgt tacacnaaca acacacaagc acacaccaca 480  
catacatata cacacgaaca catacctcca tgctgcatat acacacacag gcatacacac 540  
actctaattgt gtacacanaac ncacatgcac ataccacaca tacacacaca cacatgaaca 600  
catacctcca tgccacacag acacacacag gcatacacat actctaattgt gtcacaacac 660  
acatgcacac accacacacg aactcncaca ttcatgccac atatacacac acggncatac 720  
acacatgcag gcacatacac tacacan 747

<210> 224

<211> 857

<212> DNA

<213> Homo sapiens

<400> 224

tccaatattg actgggatga ttgttcaca tatctgaatg tatcaaaaat gattagcttc 60

aactaaatgg gttaattata tactatgtaa attatatata aataaatttg tataaaaata 120  
 taaatgaaac tattgcctgc aagtagttcc agaaagaagt tgacacattt caagaataac 180  
 aaatgttatt aaacatgtga aattgatgaa tgagaaaata tactatttcc atactcttcc 240  
 ttaaagatgt atcagtcctt aatgtatatt cctattatgg tgatattatt tatgctcagt 300  
 caatcattaa catatgctta tgaaaatctt attttactta aagaggaata ctttaaataa 360  
 attttattca attgccttag aatttaggcc tactcctaga caggaagaaa gatttccaag 420  
 aattcacaat cttctaaaac cattacctat atttattatt tatgctctta cataaccctc 480  
 agtagcacat tatttttctt gtacaattga tcagatatta tttgaaatta aagtgtctgt 540  
 ccctttcagt cagcgtgttt ctaaaatatg acaactaatg aaatcgcata gtaaagtcta 600  
 caaactaaag gctataataa gttgtaacac ttttccagaa tcacaataaa atttttctgg 660  
 atatgctgnt gtgtaaggaa ttcctcagt atagtgcatt ttgaacttca gctaatattt 720  
 ctattctctc tgagtttggg aagttatttg aattccccta cttctanggt ttttatttat 780  
 acccttaata ttcattggtt ttgncctttc taaggatat ttaaccgat ttattcactc 840  
 antggtgggg ttctatt 857

<210> 225

<211> 635

<212> DNA

<213> Homo sapiens

<400> 225

gggaccccag gcttctctg agacatccac cagcggatgat gggttgggac caatctcccc 60  
 cactctctc caccctagca gtctgtacc gctgccacgg cccccctgc tgccccggct 120  
 ggggagggtg gncncctgc acccctcca aacctacca gtaacaggag actgnagcag 180  
 acccaggccc aggtggatga ggtggtggac atcatgaggg tgaacgtgga caaggtcctg 240  
 naggagacc agaagctgnc ggagctggac gaccgtgcag atgcactcca ngcgggggcc 300  
 ttccagtttg aaacaagcgc agccaagctc aagcgcaaact actggtggaa aaacctcaag 360  
 atgatgatca tcttgggagt gatttgcgcc atcatcctca tcatcatcat aggtgagtan 420  
 ggtgagaatg gccggggccc ttccctgga gaggtttccc cagtggattc taggttttga 480

aggtcattaa tctagttntt actcttcagc caaaaacaca tatagctgct aatggcaatt 540  
 ctgattcatc tagagccaaa aactttgatg ttatttance tgcattttgc ctagttcttg 600  
 gcagtcttgn taacatttgg aaatangaaa gctgg 635

<210> 226

<211> 698

<212> DNA

<213> Homo sapiens

<400> 226

atccaaatgc attagtctta gatgaacaca cctggaatct cacttttatg agaatttcat 60  
 agactatact cttgaattcc agttgtacat ttttgcttgc aaacacaggc atttcagagt 120  
 ataatgagag gaggctgggtg ctcataaaga agactgactt tacagtaaac cacctcccag 180  
 gagaactgaa gatggggcctt gagctgaggt ggggtctctt ctccactatc ccgagcagca 240  
 cctgggcccc aggtcttcac ctagacagtc aaggacctca gcctaaacag catccagctc 300  
 ttagaagtcc tgtgaaattg ggccaggcac tgtgggtcac gcctgtaatc ccagcattta 360  
 gaaggaggct gcggcagggtg gatcacttga ggccaggagt tcgagaccag cctggccaac 420  
 atggcgaaac cccgtctcta ctaaaaatac aaaaattagc tgggtgtgat ggtgcatgcc 480  
 cgtaatccca gctattgagg agactgaggc aggagaattg cttgaacccg ggaggtggag 540  
 gtagcagtga gccaaagatgg cgccactgca ctccagcctg ggcgacagag cgagacccca 600  
 tctcaaaaaa aagaanagaa aaaagaanag aanaaaaaag atttcttgta aaattgaaaa 660  
 caaaattcag actttggcta cttgaatctt ggtaaatg 698

<210> 227

<211> 819

<212> DNA

<213> Homo sapiens

<400> 227

tactagatgg acaggctgag gtgtttggca gtgatgatga ccacattcag tttgtgcaga 60  
 aaaagccacc acgtgagaat ggccataagc agataagtag cagttcaact ggatgtctct 120  
 cttctccaaa tgctacagta caaagcccta agcatgagtg gaaaatcggt gcttcagaaa 180  
 agacttcaaa taacacttac ttgtgcctgg ctgtgctgga tggatatattc tgtgtcattt 240  
 ttcttcatgg gagaaacagc ccacagagct caccaacaag tactccaaaa ctaagtaaga 300  
 gttaaagctt tgagatgcaa caagatgagc taatcgaaaa gcccatgtct cctatgcagt 360  
 acgcacgatac tggctcggga acagcagaga tgaatggcaa actcatagct gcagggtggct 420  
 ataacagaga ggaatgtctt cgaacagtcg aatgctataa tccacataca gatcactggt 480  
 cctttcttgc tcccatgaga acaccaagag cccgatttca aatggctgta ctcatgggcc 540  
 agctctatgt ggtaggtgga tcaaattggcc actcagatga cctgagttgt ggagagatgt 600  
 atgattcaaa catagatgac tggattcctg ttccagaatt gagaactaac cgttgtaatg 660  
 caggaatgtg tgctctgac catatggtca aaaaggactg aaaaattgtg atggatttga 720  
 tcctgtacaa agttgtggac nagctggccc ctcttaacat tcggagaccc agtctgcagt 780  
 ctgtgagcct tggcgggtat ttgncataat cggngtgca 819

<210> 228

<211> 816

<212> DNA

<213> Homo sapiens

<400> 228

aggaagtcat gccatacagg aagccatcag aagttgcctg gtaaggattt aagaaaaaag 60  
 gaattaagtg gttatttggg tcataaattt tagggcatca ggttatgggt atctgatgta 120  
 tttatattaa taattacagc ttaccatggg ccagtcactc ttttaaattgc cacagcaaatt 180  
 ttatgaagta ggatatatta ttatcctcat ttgcacatga ggaaactgtg cacaaagacg 240  
 ttaaattggac tgccaaaaat cctaaagcta gtaagtgccg gtaccagtat tcaaacctag 300  
 gcagtctagc tcttaaccgc tatactatat ctccatttga aatggacagc tggttatttt 360  
 gactaaatat cctaagatat gtttgggaagg gaattacat cactgacctc ttaaattctcc 420  
 tttttctgta ctccaagct gatcaactct ttttttgtga aagactcaaa ttgttgtgtt 480

gtattacatg aatcgatata tgggataatt gctaaacatt atagacctga gagtcattct 540  
 atctctttta gaaatctttt tctttattcc ataatggata atgacaaatt caaaagcttt 600  
 aggaagtagg cagataacat aagtgaggga gatggcttgg tataagtcaa tttgaaatgg 660  
 cgagaactgt ggcaaaccac tactcactcg tcacttggct tcagctgctc tgtgcaaata 720  
 tggatccaat ggtatcagat atttaaggnc aggaatggng gcttatgcct ataatcccag 780  
 cactttggga ngccaggtgg gaggatgctt gaccta 816

<210> 229

<211> 772

<212> DNA

<213> Homo sapiens

<400> 229

ggatttggga taagtctaaa acttcagact taaagctttg aagcatgtta actgcatgaa 60  
 atattaaaca tttcgaactt ctttagcctt tgtcattttg tgaccaggt ttttcatagt 120  
 ctgctctatg tctcctgctt ttccttggtt tgctaatacat cctccttgag ctccactgtt 180  
 ttcactctgg gcatccaatc cagcctttca tgggtgtgtgc ttcacaggc ccctggttca 240  
 catgctgagt gccttataag cctggccagc actagtatat tctcattaac aaacaaacag 300  
 tcagcttcgt ttgggagggt gcttcacttt caaagctacc cagtataatg catacaatgc 360  
 agtacaagcg gaactcactc agaagtagca cctgagcttc aaatagactc tcctgatcat 420  
 tctactgagt aagattctcc acatttaaga atcaatacag gatttacttg cgaggatagt 480  
 gtataaaaat ggaatagttt ttctatttct ggactgaaac caaactcctc atatctaatt 540  
 gtagttattc aacattatca gaatccctat ttattttggc agaacagaca aaaggacgtg 600  
 gaatgtactt tctgctacag ccgttacagt caactagatt tgagtgtgtc cgctggtaag 660  
 ttaattgaat agccaagtta tgggtgcctta cccaagtaga cagtggaaag gaataatggc 720  
 agangccatg atgcgagtct gggcacagcc atgcatccca tctgngnga tc 772

<210> 230

<211> 818



<212> DNA

<213> Homo sapiens

<400> 230

```

aacatttata gctttaaaaa taccttacgt acttcaataa ctatgtggaa gcactaagaa   60
agattctgta taaaacatcg caagtttggg aaaaatacat ctttacatct tttcctccag  120
cttcattttc tcagaggcag gagcaggcca gtgggtttcca tactgcggct cctctaggag  180
ccacctgaga accaaaccac caatccagca tctcccaccc catcatccag atcctcccga  240
tgccctctca tatgtgggtt ctgtgacca gaagcctcca taatgaacca caggagaaca  300
ccatgggcca gccaacagtt aggctcttca cataccaaat aaaccaccac aggaaccctt  360
aacctcatct actgcctgat ccaaacaatc ctgctttgaa ctcaatggtc tttcttgagc  420
ctttatgata aatacatagt gcacttttag tccctctgaa gcagattatg ttgtcacaat  480
tatgactcaa ctttaatagt ttcaaccaga aactgttttag gatccaacat acaagagagt  540
caactacatt tcataatatt agccatttta agagtatttt tcaaagtgtg ttctgtggat  600
gttaataggt gatactgttc cagaagttct gtggcaaact aatccaggac ttctcagaac  660
ctttaatata tgnttcatat acatttacat ttcangcctc tgaaaggcag aatcctcaaa  720
tttatttata catggaagct tttttccct canagcaact tacaggacta ctttgggaaa  780
cactggctaa gggtcctaag anctcatgaa anccctta                               818

```

<210> 231

<211> 899

<212> DNA

<213> Homo sapiens

<400> 231

```

tcggttaaaa gccagaagtt atgagcttca ggaaagcaat gtacggctga agttaaccat   60
tgttgacacc gtgggatttg gagaccagat aaataaagat gacagctata agccgatagt  120
agaatatatt gatgccagct tcgaggccta cctgcaagag gaattgaaga ttaaacgttc  180
tctcttcaac taccatgaca cgaggatcca tgccctgcctc tactttattg cccctactgg  240

```

acattcacta aagtccttgg atctgggtcac catgaaaaag ctggacagta aggtgaacat 300  
 cattccaata attgcaaaag ctgacacccat tgccaagaat gaactgcaca aattcgagag 360  
 taagatcatg agtgaactgg tcagcaatgg ggtccagata tatcagtttc cactgatga 420  
 agaaacggtg gcagagatta acgcaacaat gagtgtccat ctcccatttg cagtggtttg 480  
 cagcaccgaa gaggtgaaga ttggcaacaa gatggcaaag gccaggcagt acccctgggg 540  
 tgttggtgcag gttgagaatg aaaatcattg cgattttgtg aaacttcgag agatgctgat 600  
 ccgcgtgaac atggaggact tgcgagagca gactcacacc cgccactatg aattgtaccg 660  
 acgctgtaag cttgaagaga tggggttcaa ggacactgac cctgacagca aacccttcag 720  
 tcttcaggag acatatgaag caaaaaggaa tgaattcctg ggagaactgc agaagaaaga 780  
 agaagaaatg agacaatgtt ggtatgagag tgaaggagaa agaactgact taagaggcan 840  
 aggaagactt acgagaagtt gacctttaag cggccccag aagaaagaag aaggagca 899

<210> 232

<211> 846

<212> DNA

<213> Homo sapiens

<400> 232

gctcaaatat attatgctct ctcttgactc tgtgcctttg caagtgacat tcaattggcc 60  
 tgaacactgt tccagctccc tctgttcttt ccaggatgag cttctcgcgc ttccaaatct 120  
 cagtttagac gtgctcttct ctgggaagtt tattcattta ctgtgtgtta gatgttggtc 180  
 taggcccttg ggatgtagca gagaagaaga caaagtcact gcatttggtg aggagctgtc 240  
 atcttcagaa tcaaaacttc cccttagtgc agtgtccacc tccagatact gcttcatttc 300  
 tctgctctct ttgttcatga aactttttca ataattgctt tttcatttct tcatctccag 360  
 tttttatcta attccaattt agtttctctc tccatgactc tgctcacact gatttttctc 420  
 agacaccaac ttttttttgc cgcctaatac aatcgccatg tttttcttc atgttatttg 480  
 atccttttag tggcactggg cataaatgac cacacgttc ttttcgaaac attatcatga 540  
 cttttctgat gccacattct cctggctttt cttttgcccc acaggaattc ctgtagacat 600  
 ccaactgcctt actagatgta gggagcacct cagggccag ccctggccca ctctctctt 660

tagccctcat acttttccta agtggtacca tctgggccct tgcttgaaat gccaaatggc 720  
 attaaatgcc aaaaggatat cttcagccca actttgnttt aaccccagca actggatggc 780  
 cagatccttt ttctncctta atggataagg attaaggaat catatgagga tgcttaaacc 840  
 aaagtn 846

<210> 233

<211> 719

<212> DNA

<213> Homo sapiens

<400> 233

ccgcgctgtc cgccgccgct gcctgagtcg actctgcgcc gcccgccgcg atggaggccg 60  
 ccgcccagtt cttcgctcag agcccgagcg tggctctacgg ccccgaggcc atcgaggcgc 120  
 aatacagagta ccggacgacg cgcgtcagcc gcgagggtgg cgttctcaag gtgcacccca 180  
 cgtccacgcg cttcaccttc cggaccgccc ggcaggtgcc ccggctcggg gtcattgctt 240  
 tcggctgggg cggaacaac ggctccacac tcaccgccgc ggtgctggcc aatcgactgc 300  
 gtttgtcctg gccacgcgc agcggccgca aggaggccaa ctactacggc tcgctgactc 360  
 aggcgggcac cgtgagcctg ggcctggacg ccgagggccca ggaggtgttc gtacccttca 420  
 gcgcggtgct gcccatgggt gcgccaacg acctcgtgtt cgatggctgg gacatctcgt 480  
 cgctgaacct ggccgaggcg atgcggcgcg cgaagggtgct ggactggggg ctgcaggagc 540  
 aactgtggcc gcacatggag gccctgcggc cccggcttct gtttacatcc ccgaattcat 600  
 cgcggaacc agagcgcgcg cgcggaac ctnatccaag ctgcgtgcg cagcaactgg 660  
 acagatccgc agggacatcc ganactttcc ggtctancgc gggctggaca aaagtcata 719

<210> 234

<211> 772

<212> DNA

<213> Homo sapiens

<400> 234

```

ttgcggggag ggcccagagt cgctgtgtcc ggggcagagc ggccggttcg tcccagagtct 60
gcgctctttc ggggtccgctg ctgtgtcccc gtccgctctc ctcagcatga gcggccggta 120
ggagtgaggt ttcacggtt ccctcgact ggaggaggca gcggccgctt cggcagcgac 180
agctatggcg gtagagacgc gggcagagct ggtgggtaag cggttcctgt gtgtggcggt 240
cggcgacgag gcacgttcgg agcgctggga gagcggacgc ggctggcgaa gctggcgagc 300
gggggtcatc cgagccgtgt cacacaggga cagccgaat ccggacctgg cgggtgtatgt 360
ggaatttgat gatcttgaat gggataaacg agagtgggtt aaagtttatg aagatttttc 420
aactttcttg gtggaatacc acttaatctg ggccaaaagg aatgacccta gccagactca 480
gggatcaaag agcaaacaga ttcagtggcc tgcattgact ttcaaacctc tggttgaaag 540
aaatataccc agttcagtca ctgcagtaga attccttgta gataagcaac tggatttttt 600
aactgaagat agtgcctttc agccctacca ggacgacata gacagnctaa acccagttct 660
canggacaac ccgcacttca tgaggaantg aaagtctggg taaaggaaca aaagggtcag 720
gagattttta tgcaagggtc ttattcctta aatggatccn gantgagagt tt 772

```

<210> 235

<211> 714

<212> DNA

<213> Homo sapiens

<400> 235

```

aaataaaagc atattttgag ggaataaaga agcagaaaaa caaagaagaa tctggggaag 60
atgggcataa atctccacca agtgtgccca aggcttccca ggcgaggctg ctgaaaagac 120
cctgtggagg tagagggaca atttgtcatg gatgggaatg ggcttgaggg ccgggaagca 180
gggcatgatg gggcctcatt catcattttc ccgttatccc agcggcgtgc aggggagcag 240
gtacagcacc tgccaagtga gtgaccagag ggggactggg aatggaaagg acctcaagga 300
aggacaagct gagctctggg aggccacctc ctccaggaag ccttcctga ttcaccttc 360
acaggcagtc tcaatttgca gtcagatata cactgctctg attcttagat cggcaagtat 420
ctccctaccc agactgcagg ctctgctggg gccgcggctg tttctgactt gtgcacaatg 480

```

gcacccctgt acctagcaca ggactgagtc cagagaaagt gctcagtgat gcttggtggc 540  
 ctgtctctcc tctgtgggca gcaactggaca gggcacccgg cgggtcctga nggtgtggac 600  
 atcccacggc agagcctgcg gttgatcccg accatgaacc aaggcctggg gcgggggtgg 660  
 ccacatcagg ccactttttg ccaggaaana tgtggcttgn naacctgggg gtct 714

<210> 236

<211> 636

<212> DNA

<213> Homo sapiens

<400> 236

aacgtaatga aacctcgtct ctacaataag tagaaaaatt agccatgtgt ggtagtgcac 60  
 gcctgtggtc ccaggtactt gggaggctga ggcagcagga tcacttggac ctgaggggtc 120  
 gaggtgcag tcagccctga ttgctgccac tgcactccag tctgggcaac agagaagact 180  
 gtctcaaaac aaaaacaaca ttactcagga atgaaggaaa tgggtggaatt gagaagacgg 240  
 gactaaagcc aattaatggg gtatggcaat agtctagtgt gaagagggtta aggtcatgca 300  
 gtaggacata atagggctga agaagtatgg atggaattga caaactttta aagggtagaa 360  
 ttcacaagat ttgatgaaca aatgcatgta agagaacata tacaatgcat tgtaagggtac 420  
 ttactgctat aattaacat tgtatgtttc caaaatgtat gtgtataaat agtcaacagt 480  
 gataacagga tccaatcatg gacaaccagt ttgattggat ataaattttg aaagaaagtg 540  
 tgtgtgtgtt tgtgtgtgtg tatgtgtgaa tgtgtctggg gaagttaaga aaaattttga 600  
 gtttgnccata ttgatggcaa gcanctgcng caggga 636

<210> 237

<211> 703

<212> DNA

<213> Homo sapiens

<400> 237

tctgtcgtg actccgcgcc gcgcgccgac cgcgcgcccg cccagccggc catgcacgca 60  
 gtgccgcgcg gctttggcaa gaaagtgcgt gtgggcgtgc agtcctgtcc cagccccctc 120  
 tcgggccagg cgtgccccca gccctcctcc gtgttcgtgt ctctgttgaa gaacctgccc 180  
 ttcttggaac acctcgagct gattgggtcc aacttctcct ccgccatgcc ccgcaacgag 240  
 cccgccatcc gcaactcgtt cccaccctgc agccgcgcac agagtgtcgg ggactcggag 300  
 gtggccgcca tcggccagct ggcccttcctg cggcacctga cgctcgcaca gctgcccagc 360  
 gtccttacgg gctccgggct ggtcaatata ggcccgcagt gccagcagtt gcggtccctg 420  
 tcgctggcca acctgggcat gatggggaag gtggtgtaca tgcccgcgt ctcagacatg 480  
 ttgaagcact gcaagcggct gagggacctc aggctggagc agccctactt cagcgccaac 540  
 gccagttct tccaggcgct gagccagtgc ccctcgtga gcgcctgtgc ctggnctctc 600  
 gcagcggcac cctncaacc gatgccgtgc tggccttcat ggcttgcttg cctgcaggtt 660  
 ggcatgtgcc accttgttca ccggggaagn cccttgnac ctg 703

<210> 238

<211> 791

<212> DNA

<213> Homo sapiens

<400> 238

tgggcagcag cagaagcagc agcagcagct ccagcttctt ccctccctcc ccaaggagaa 60  
 gagttccctc ctcctcctcc tctgtttct cctgctcaga gttcctgcct ccagctgcca 120  
 ggggggacag ccagccagca gcaggagggg ggctagagag ctgaaggaga gccagtttcc 180  
 ccaaaattgc tgcagtgaga agaggagttt gttactttta acagaggctg aagaaactat 240  
 agaattagca gagaaagtgg agaaggtaga ggatggagtt gcagactcta caggaggctc 300  
 ttaaagtgga aattcaggtt caccagaaac tggttgtca aatgaagcag gatccacaga 360  
 atgctgactt aaagaaacag cttcatgaac tccaagccaa aatcacagct ttgagtgaga 420  
 aacagaaaag agtagttgaa cagctacgga agaacctgat agtaaagcaa gaacaaccgg 480  
 acaagttcca aatacagcca ttgccacaat ctgaaaacaa actacaaaca gcacagcagc 540  
 aaccactaca gcaactacaa caacagcagc agtaccacca ccaccacgcc cagcagtcag 600

ctgcagcctc tcccaacctg actgcttcac agaagactgt aactacagct tctatgatta 660  
ccacaaagac actacctctc gtcttgaaag cagcaactgc gaccatgcct gcctctgtgg 720  
tggccanaga cctaccattg ctatgggtgan ccgccttaac agtcanaagc tgggctcaac 780  
acttgatgtg c 791

<210> 239

<211> 797

<212> DNA

<213> Homo sapiens

<400> 239

gataccctta agggagaact ctggagcact aactgtgtgt tccctacaga tgcgtccacc 60  
acctcccccg ccggctaaag ccccgatcc tggccacca gatccctca cctgaaggcc 120  
agggaagcct tgacccccag tgatgtgtgt gtccctatct tcaagctgtc agaccacacc 180  
atcaatgata cagagcaaca cagccaaaag ctggaatgc cttatttcc accctcacct 240  
ccaagggtgg aaacttgccc ctteccattt ctagagctgg aaccactcc ttttttccc 300  
attgttctat catctctagg accggaacta cttctcttc tgcctgacc ctatctaggg 360  
tggcgaaatg cctgaaatct ctggggctgg aaaccatcca tcaaggtctc tagtagttct 420  
ggcccacctc tttccccacc ctggctccat gaccacccc actctggatg ccagggtcac 480  
tggggttggg ctggggagag gaacaggcct tgggaatcag gagctggagc caggatgcga 540  
agcagctgta atggtctgag cggatttatt gacaatgaat aaagggcacg aaggccaggc 600  
cagggcctgg gcctcttggt ctaagagggc anggggccta cgggctattg ctttangggc 660  
ccaccacggg caggggcctg ttccagctgc cagctctat catatggagc gaggtgttgg 720  
ggaaggcngg gcaagcaagc ctgttgangc aggggaagga gaagagactg agggctttga 780  
cctttctgag gcccacn 797

<210> 240

<211> 771

<212> DNA

<213> Homo sapiens

<400> 240

```

attagcttaa atgttacggc cacttaaaaa ttctacatat gactattggt taaatacatt 60
tttcatgtct ctgatgtagt ccttatttga cataagtatt ttattcactg ctttaattgtt 120
agatagatta tagacagctg ttactaagta atactgctcc attagggcag aaacagaaac 180
tttatttttaa ttaaattgtgt actaatgttt gagtttctat attttgctac agtgataatt 240
ccagtaaaat aaactgtagg cctctagtgt ttttagaatt ttaaaactgt aaatggactc 300
agagaatcag ttctttatta gacgtcatga gagtatattt ttttcattat gctttaagag 360
ggaatttgta acttgctcag gtaacattca agttttctgg tttgtgtttg tccctacaat 420
taaacacact gaactaacag gaaaaggtta catacattta ggaacaattg cacttttaaa 480
gggagagaat gcatagtgc tcacatatct cagtgtcagt cacctaacat ggatcagtgc 540
tttatttgag attacaaaac tagaaaatga cggagtcaag gctaggacca atattctggt 600
cagtcttaga taattataga atacacatta aaatcagata tttgaatttt ctttaatttg 660
taactatttg gcattgaaag gagatactaa aaaaattata tatcgccatg aaagtncatg 720
aactaataat gcatttctaa aggtgaaaaa ngaataggna tttttctggt t 771

```

<210> 241

<211> 686

<212> DNA

<213> Homo sapiens

<400> 241

```

aagacctctt agaccagctc ttgtccatca tttgctgaag tggaccaact agttccccag 60
taggggggtct cccctggcaa ttcttgatcg gcgtttggac atctcagatc gcttccaatg 120
aagatggcct tgccttgggg tcctgcttgt ttcataatca tciaactatg ggacaagggt 180
gtgccggcag ctctggggga aggagcacgg ggctgatcaa gccatccagg aaacactgga 240
ggacttgtcc agccttgaaa gaactctagt ggtttctgaa tctagcccac ttggcggtaa 300
gcatgatgca acttctgcaa ctctgctggt ggcttttggg gccagggtgg tacttatttc 360

```



ttttagggga ttgtcaggag gtgaccactc tcacggtgaa ataccaagtg tcagaggaag 420  
 tgccatctgg tacagtgatc gggaagctgt cccaggaact gggccgggag gagaggcgga 480  
 ggcaagctgg ggccgccttc cagggtgttg agctgcctca ggcgctcccc attcaggtgg 540  
 actctgagga aggcttgctc agcacaggca ggcggctgga tcgagagcag ctatgccgac 600  
 agtgggatcc ctgcctggnt tcctttgatg ngcttgccac angggatttg gctctgatcc 660  
 atgtggagat ccaagtgcct ggacat 686

<210> 242

<211> 726

<212> DNA

<213> Homo sapiens

<400> 242

aagatgaaca agagccgcca gcgcgtgcgc tacgactcct ccaaccaggt caagggaag 60  
 cccgacctga acacggcgct gcccggtgcgc cagacggcgt ccatcttcaa gcagccggtg 120  
 accaagatta ccaaccaccc cagcaacaag gtcaagagcg acccgagaa ggcgggtggac 180  
 cagccgcgcc agctcttctg ggagaagaag ctgagcggcc tgaacgcctt cgacattgct 240  
 gaggagctgg tcaagacat ggacctcccc aagggcctgc agggggtggg acctggctgc 300  
 acggatgaga cgctgctgtc ggccatcgcc agcgccctgc aactagcac catgcccac 360  
 acgggacagc tctcgccgc cgtggagaag aaccccggcg tatggctcaa caccacgcag 420  
 cccctgtgca aagccttcat ggtgaccgac gaggacatca ggaagcagga agagctggtg 480  
 cagcaggtgc ggaagcggct ggaggaggcg ctgatggccg acatgctggc gcacgtggag 540  
 gagctggccc gtgacgggga ggcgccntg gacaaggcct gcgctgagga cgacgacgag 600  
 gaagacgagg aggaggagga ggaggagccc gaccggacc cggagatgga gcacgtctag 660  
 ggcagaagcc cttgccnaga agcccgtgct tgccttgctg gagcccgnct tgcanacccg 720  
 gtcctt 726

<210> 243

<211> 756

<212> DNA

<213> Homo sapiens

<400> 243

```

aagccattca acaaattctt aggaagticc atactttccc acattttcct gtctttcttct 60
gagccctcca aactgttcca tcctctgcct gttaccaggt tccaaagctg ctttcacatt 120
ttcgggtgtc ttttagcag taccccactc tcggtacca tttactgtat ttgtctgtta 180
ttatgctgct gataaagaca tacctgagac tgggcaattt aacaaaagaa agaggtttta 240
ttggacttaa cagttccatg tggctgggga ggcctcaaaa ttatggcgga aggtgaaagg 300
cacatttcac atggcagcag acaagagaag agagcttggt cagggaattt ccgtttttta 360
aaacaatcag atctcttgag acttagtata acgagaacag cacaggaaag acatgcctcc 420
atgattcaat tccctccac aacacatgga aattcaagat gagatgtggg tggggaatac 480
agccaaatca tatcaatttc taagcaacat atttggatat ttactctgga aatgtagtta 540
caaatgagca gttccaaata gaagagtgcg atttacttca gctttgcaca aaagcaggta 600
aagaggtatg cctatatatt gaggctagaa caactagaat atcatatttc ttttcttagt 660
ggtgatagga aagcctactt tcctggacca gagaagcaga tgtaagtagc cttangaatt 720
gctgngcttt ttctgctgnc agtcccctgc tcatga 756

```

<210> 244

<211> 820

<212> DNA

<213> Homo sapiens

<400> 244

```

ttttgcttga ggccttgaag catgcattct cagggtacgt cctaccctta caagtcctac 60
tgacttctta atcagtaatt ccggctgggc acggtgggtc acgcctgtaa tcccagcact 120
ttgggaggct gaggcagggg atcacctgag gtcaggagtt tgagaccagc ctggccaaca 180
tggtgaaacc ccgtctctac taaaaatata aaattagccg ggcatggggg cgcatgcctg 240
taatcccagc tacttgggag gctgaggcag gagaatggct tggaccggg aagcggaggt 300

```

tgcagtgagc cgagatcgtg ccatcgcaact gcagcctggg tgacaagaac aaaacttcat 360  
 ctcaaaaaaa aaaaaaaaaa aaatcagtaa ttctagattg gccctagggt gcttttagca 420  
 ttggaaacct aatgcacaaa gtgatggta tattggactg atctgtaatt cactgttttc 480  
 tgttattatt ctatctctta atcttaggct aaagtaaata atgccagcct gattggactg 540  
 gggttatactc agacccttcg accaggtaag taaaggaatt agtaacagag gggttgaggt 600  
 ggaaggatgat agagaaaaca atgaaaataa cctgcagaac aacctgtagt cactgtaagt 660  
 tgatttggac cattttgtaa catttgggtg ttcagacaga aaacaataca gatcaaatac 720  
 ttttgcatta aaaaagtatg natttctgac tataatngg cactttggcc tttgagtttg 780  
 gttgatcact cattgcctta accctgaact ttanagaaag 820

<210> 245

<211> 763

<212> DNA

<213> Homo sapiens

<400> 245

gctctgcttt gtaagcagga accgcagtcc cctgaggagg gtgtgtgaag actcgtcat 60  
 ttgagttctt tgaaatgggt cccttgggtc tgctgtcaca ttgccttgag ctaacggatc 120  
 ctgttcccat cataggccgg tccttggggc attgggcagg tgggggcttt gtgcctctgt 180  
 ggctgctgct gtctgttctc taacaggcag aactgtggga ttctgaactc aggatgtgca 240  
 gctctccaga ctgagacccc aaggctgact ccaggtagg ccatgtctc tttattctca 300  
 ttacgattta tcagaaaagt gagacaaatt caggattctc aaatgctgag gcagccccgg 360  
 aattgggggg atctttctgt tgtagtcca cccatatttt caagcaggca ttaaaggaag 420  
 gtcagccact gcgcctagaa taagtaggtc aggcctgctc catccattgt ccccggtccc 480  
 gcaccctcct cctgagaaga ctgtgggtcc tgacacgtct agagaggaag ggccccgggc 540  
 tgctgagcga acacagtatg aagattgctt actgatccaa atgtccattt tattgcatgt 600  
 ttggtacttt ttttgggtana tgtaatgaa gattctctta tcacatccat tccctctgac 660  
 attagttttg agttaattga gattctttaa gcgttaacct ggggaangta agtctttatc 720  
 ttncattaga cattttaaat ttaagaatct aagnaaaaca cca 763

<210> 246

<211> 836

<212> DNA

<213> Homo sapiens

<400> 246

```

attaaaatga gaaatacata agatgataaa taaaatgaag gtgaaggtat tccagatcta   60
ccgaaaagat tttcagtatc acagattatt cataagaaat tgagaaaagg aacaatcaga  120
agttgcaaaa gatggtatag ccgaatataa tggaaatagg aaaaattagt cgaaaaataaa  180
ggttgattta gaaatgaaga aaatgaatat atttcttaat acaaaataag tgggaaatga  240
gaagttatac caataaaaag catttacaaa tttaggggat attgtaaccc agtataattt  300
tctgacaggt tggactttga ccctaattga cttactgggtg aactttttca aatgttttaa  360
taatgtctat ccatgtatca tgaaggacag tatgcttcaa attgtctttt gaggcagaca  420
tgttctcagt actaaaagac attttttagaa ggattttatt ctcaacagat gcaaaatgca  480
aaataaaaata ttgacaaaca atacagcaac aaataattta ctatcactca ggattataag  540
gctggtgtta agcagaacag ccattaaatc agcatcaaaa gaacaaatag taaaatccaa  600
agtattaatt acagataact tttcaaaaat tcatcattca cccttgattt aattatttct  660
ctggcaatta tttaatagac ttctcggagt ctggttaagtc ttaaaccaag aactccatta  720
ttcctactgg gaaaacttaa catttctcaa gtggaagtaa acatgttgca ctattttata  780
tatggttaag agcctgtatt gcataaagcc annttcccaa atgagganat aggaag      836

```

<210> 247

<211> 680

<212> DNA

<213> Homo sapiens

<400> 247

```

agagacccat gcattaatat cattattaat tccatgcatt aatatcatta ttaattctat   60

```

gcattaatgt tattaattcc atgaatgtgg caggtatfff tttaacattt attgtaggct 120  
 cagctgtcta ctgggtgttc tgagaaaata caaggaagct atagtaatgc agtgataca 180  
 tacattcttt cctgcatatt aggaacctat agtctaattg gggatgtaag ctttcacgca 240  
 tgaaaagaca ggtaaagtga gaagacaatt tcttatgagt ttcagtgagt catgcagaca 300  
 gtactggagg agttcacagg tggaagggga tgcagggaat gagagttagt gagaggaact 360  
 aggagatcag gaaagtcttt ctggggggagt gaagatttga ctggacttta aaaaatgggt 420  
 aaaagaaggc aggatttcta gtagggaatc ttagaaacac aaggacacaa agaactgca 480  
 tggaccattt gagggatggt gaagaaatca ccccaactgg aataaatgtg ttgggtagtg 540  
 ggagatgaat ctaggaaggt ggtttggagt tatattttga aggatcttgn tgggtgaagt 600  
 aaggatccat ggacttgctc tttggagcag gagagagtaa ttaaaatatt ttaagcagcn 660  
 naatgatgca tcagattcag 680

<210> 248

<211> 826

<212> DNA

<213> Homo sapiens

<400> 248

attaagatgt ggccttacat atggcattcc ttgtgttcgt aatgtgagat ttttgattta 60  
 gataaatcaa gattcaggat taaagtttca ttgtaagttg aaatagaaaa tgtattaaaa 120  
 tgtctaggct tctgggagga agttcttata ctcttctttc ttggcattag aaagaagcaa 180  
 tatgaatttt tgtgaatatt cttaatattc aggcaacact gttcagattg atttaggttt 240  
 gtcttaacca atgttctttt tttagaattt caggtagtgg cattcactga gtatgcagct 300  
 actatggttt ttgtatggga cgtataaata cttgattata tacgacagat tttaatgtct 360  
 ttaaagactt cctgctgtat taacatattg taatggagtc ttttaaatac taggttgaat 420  
 ttaattgaag tcacacacat ctggaagtgg taactgcata gtaaatacta ccaagagttt 480  
 ttttcacgtg ggagtatcct aaaactctgc catgggtgta aatgttttac attaatitca 540  
 taattggaca gaccctgcat tttagcggaaa cattttgttt tgaaagtgtg ttctttttgt 600  
 cgcactgtta ctgcgtaaca cttctcaaca ttctgtaagt taaattattt taaaataact 660

atgggtgaatt catgtttatt ttttttactt tgaaaattgt agtactcang tggatatttaa 720  
 tggggaaagg atcctttggg tataaatcat aatgnatttt aaggaatgca tctattacca 780  
 ttgataacct ttaaccttaa aaaaaaangg nctaattaat tccctt 826

<210> 249

<211> 779

<212> DNA

<213> Homo sapiens

<400> 249

ttgcctttta aatagcaata aacatgggtgt aattggttta ggaaggctgt gctccatgga 60  
 gaagagctgg tactacattt aatttatctt gtagcatagt gttttctcaa actatgctta 120  
 gaagaatact ggcticctga ggtgttgatt ggtgttgctt ggaaatacaa ggagcttctg 180  
 aggccaagta atgtggcaaa cactggggta ggccagttac ctgggggttaa ctttccggca 240  
 ggacttctca gagtctttta tatgctactc tgcatacataa attttcaaga gcttgccttg 300  
 tacctatttg tctttccctt ttcatagtgc tcacagggtt tcatggatct cagcatagaa 360  
 aaggctgctt tagggtagag gcagctgcca gcagtcttta gaaagtgagt gatttctatt 420  
 tcagaaagggt aacactgagc acctgggaag gaaaacgcca aggatgagaa actagaccca 480  
 aggcaaccta taatgaggct gttaaaattt tctaggcaca agaaaatgag gctcagaatt 540  
 agggcagtga aaatgtgagg gaagagatag aattgagaga tgcttaggag gtagaatgga 600  
 tactccataa ccacaaggat ggtgaatgag agaataaaat agttgaagggt gaatcccaag 660  
 tttctagctg ggaagcttgg acagagaagt gttgggtaga agatgaaaaa caatttaatt 720  
 tgggacatac ngataaagat ggcaactcat anccagcaac tggtgatact aatgaanca 779

<210> 250

<211> 799

<212> DNA

<213> Homo sapiens

<400> 250

```

agagacgcca gaggtgcagc tccagcagca atggcagtga cggcgttggc ggcgcgagacg   60
tggcttggcg tgtggggcgt gaggaccatg caagcccgag gcttcggctc ggatcagtcc   120
gagaatgtcg accggggcgc gggctccatc cgggaagccg gtggggcctt cggaagaga   180
gagcaggctg aagaggaacg atatttccgg tgaggctcac cgggtcccaa gtccagccct   240
ggatctccca atggccttcc aatccttaaa ctgccaatcg cccacccgt tcctacctgg   300
tgccttgggc gcccacccc ccaacagAAC tccggggccc caatccagta taccctaacc   360
cttgatgtcc cgaccgttgc cacgtatagg gcactcccag ttacctgcac aacagtttca   420
ggcccccaaa ccgtttccac cggcggggtct ccaaaacaac ccacggctca actcctcctt   480
tatcattacc atctcccgcg tggagtcttc ctcaggctcg gcgaaacacc cccagattct   540
tcgcacagtg tctagatccg accgcccAAC gtttgcctcc cagcctgact ccctcgcccc   600
ttaccacact gtcacccct ctacgtcttc ctccctcgcc agcacgcctt agctttgcaa   660
gcctgcatgc attcangctt ctcagtgttt ctagaccccc gacttcgcaa gagtgangat   720
gatgggaact ggtcatggga actacttatg gntggacacc atcttctaaa ggctttggcc   780
tatnaacca actaaactg

```

799

<210> 251

<211> 758

<212> DNA

<213> Homo sapiens

<400> 251

```

tttttgagg tttatttcat tgtttgcct tgatactgta gtctttcctc aactatctga   60
tgattctcag acaactcatt atttaagagc taaggcttcc tgggagcttt gcatatatgg   120
acaggcttat tgacggatat attttgtttt aggatggctg ggtgaacagc caaatcttag   180
ctggggctct acaaattccg gaattgtgag gagtttgctc ttctcaccag tgtccatagc   240
aactagtgta gttctcagtt tgttcagctt ctttagggaa gaaccttate tttttctttt   300
tttcatggag tgtaaataac tgccaatgtt gtggggctgg tggcagaatt gacgcttcta   360
attattcaac acttcaccct tctgatttca aaccctctga ctgctgttta acattgttcc   420

```

cgcccttctct gagtctgaag cctctgaatc tgaaggacc aaacaaacct cttgactatt 480  
 acaggttgta gcttatttct ttctgcttca ctcttcctta tatattttgt tttgtacaag 540  
 tttctagaaa tctttcatca cctcatggcc tgtttctctt ttcttccttg ntaagggttt 600  
 atacgtttta taatatttta tttttaatga tttcagtaag gtttcttgtc aaagtggatt 660  
 tattgaattg gaattccagc atatttatca ttaagctgag aagggaataa tgcagggttt 720  
 taccagtaga atgtcttctt aantganggn ccatgggt 758

<210> 252

<211> 786

<212> DNA

<213> Homo sapiens

<400> 252

agcgcgaccc gacagcctgg gaaacggaca gccgtgtcag aagggcaggt gccagtgggc 60  
 aggaggccgg agagaaagcc gcagcttctt tccacctgc gccgggcccg cgcccgcgca 120  
 cggggaccgc tccgagttcc tcccggcggg aacccccgc cccagaactt tgggtctcgc 180  
 ccaccacccc ccgcccgcgc catgggtctc ccctaggagg ccatcgataa ctctacgctc 240  
 ggctctgac gactcgctcc ggctccctc gccgtcctgg acacggcgga gtgcggagcc 300  
 gcccgtaaga tgctctgacc ttgaccctg ccgttcagct ctagggcccg tgcaggccac 360  
 accatgaaca cctccccagg cacggtgggc agtgaccgg tcctcctggc cactgcaggc 420  
 tacgaccaca ccgtgcgctt ctggcaggcc cacagcggca tctgcaccg gacggtgcag 480  
 caccaggact ccgtgaatgc cttggaggtc acaccggacc gcagcatgat tgctgctgca 540  
 ggttaccagc acatccgcat gtatgatctc aactccaata accctaacc catcatcagc 600  
 tacgacggcg tcaacaagaa catcgctct gtgggcttnc acgaagacgg ccgctggatg 660  
 tacacgggcc ggcaaggac tggacaagcc aggatcttgg gaacctcagg tncgggaac 720  
 ctgcaatggc caaccggatc tttcangtga acgaaccca ntttaacttg gtgtgccttg 780  
 aacccg 786

<210> 253



<211> 805

<212> DNA

<213> Homo sapiens

<400> 253

```

tttatatata aggaatgcaa ttacctctca aaatttatga gaacaaactc aagtccatag   60
aaacctctgg agctgagcat cctcagttca aatgctggct ctgccactta ccagctgcat   120
gatcttgggc aagttaatct gcctcaaggc tttggcaaga tcaaagggtt gctatgacct   180
gatgcacaca tggtagctga cttcaggttag gtactgagtg catgtcactg gtggcagatt   240
gcattgcccc aaggcgtctg aacaattaaa gatgtcccag acctcctgct ctaacaacat   300
gactgacatt gctctcactg agaggtggcg tctatgttcc tcccgtttaa tctgggaaga   360
gaggagtacc caggctaggt catagaaggt gatgcaggtt ccactcagct cacctgtgct   420
cactccctct tctttttttt cctctctctc tctctctccc tccaactccc catacctctg   480
tctctctctg ctacccttg aatgcagcta ccatgctgtg aggaaacctg gactaggcca   540
gctggaaaga ggacatggac aggcctatct ggggaggagc tgagtgaggc cccagtgaca   600
gcaaacaatca gtgtcagat gtgcaatgga tgagccttca gcaggctctg ctgtgccctt   660
ttcaaagtca tatttattat gcagccagag ttggcagcaa gcactaagct gtgacagtgc   720
aagtaattta attggtgang cccattcttg caactacctc tngactagt ggagacaact   780
tagatcccag atnaagggat gggggg                                     805

```

<210> 254

<211> 749

<212> DNA

<213> Homo sapiens

<400> 254

```

catatttgtg taaaatttta ctgctttcat ttgtttttct ttaaataagac catctttaat   60
atatatgcat tctttttttt tttaaaaaaa agaagcattt taaaaaagga aacatttccc   120
ttattatctt gtcacttgcc aaaaatagaa ggtaacttaa aaataaatgc aatcaaacca   180

```

aaacgatgcc attacattct agctagagtt gtatcataat atctcacaaa agagattgtg 240  
aagcagagca gatgtgttaa aacggagatg ttctacttgg tgtgtcaagg atttaaagac 300  
ttggaaaaga aagaattatc tcactatgta agttaatatac atttgacaac ctcacctatc 360  
aaattaccta taaaccaccc tatgtcatct tatgggccac tgctggtaag agtcccagac 420  
attgggaaac aacgtggtca gaaactttca acatgaagct ttcaatatga tcaagctgga 480  
tggttgcggg tgggagaggt atgaagcagt catcaaacaa gacatgcttt ttggctgaaa 540  
ttcagtggta tttttgttac caggattctt agttttcaga atgaggtacc aaatgtattt 600  
ttgcaatggt ttaattccct tccttaggta attccttagtg acttatttgg gcaacattag 660  
tgttgctata tagaataagt ttcatttttag atgacgtggn ctttctgntc tgggtngctc 720  
ttcgaatgac ccattaagca cattctagg 749

<210> 255

<211> 790

<212> DNA

<213> Homo sapiens

<400> 255

agtctttttc cccctccctt actcttcgtc cccggtccct cccctcccca cccctttcct 60  
tctagctccg acgtttgcgg ccgcgggggc ggcggaggat atggagtaaa gccagagtca 120  
gtggccaggc acgaaggcag agcaggaaca gccaggaggc gtttattagg ggggcggggg 180  
gaaagagccc cagcaccgcc cctcctggaa gaaggaagag gaagtggcag tttttgtctt 240  
tgataaaaaa ctgattgaca agtatcaaaa atttgaaaag gatcaaatca ttgattctct 300  
aaaacgagga gtccaacagt taactcggct tcgacacct cgacttctta ctgtccagca 360  
tcctttanaa gaatccaggg attgcttggc attttgtaca gaaccagttt ttgccagttt 420  
agccaatggt cttggtaact gggaaaatct acctccctt atatctccag acattaagga 480  
ttataaactt tatgatgtag aaaccaaata tggtttgctt caggtttctg aaggattgtc 540  
attcttgcat agcagtgtga aaatggtgca tggaatatc actcctgaaa atataatttt 600  
gaataaaaagt ggagcctgga aaataatggg ttttgatttt tgtgtatcat caaccaatcc 660  
ttctgaacaa gaggcctaaat ttccttgtaa gaatgggacc caaatttacc ttcattngnt 720

cttncaaate ctgaatattt ggctnctgaa tacatacttt ctgtgaactt gtgaaacagc 780  
cagtgatatg 790

<210> 256

<211> 788

<212> DNA

<213> Homo sapiens

<400> 256

ctaaatatag ttccctcctc gggacaacaa agaagccatc ctctgaatga ctgcattccc 60  
catggccagc ttctgggctg tttgtcagat tccccagca ggatgggagg gaggagtggg 120  
ggcaaacagg agtggccagg gctggagagg agctgctgaa gtccatgcag cagggtgctg 180  
tcttccagcc atatgacatt tgggcccaaga cgctcagtgg ctatggcctt gaccgtgagt 240  
tctgccttc tgtctctggg gatgcatggg gccagagcc ctgtcccggg caggtgctac 300  
taagttgtga ctgaagaaga ggagagagaa atgggtgatct cccagcagg aaatgaaaag 360  
tgtctgtcgg ctccagtcca gtcaagctgg gtgacctctg ggcagattct atccttaagt 420  
ctcagtttcc acatctgtga agtagggata aggactatgt caaggagact agagagaaat 480  
tgtgccaggt ggcgggcact agtggctcta tctggccagg gctctgtgcc tgcatgtgat 540  
ggattgcagg catagccttt gaagtgcctt ttgatgtgcc tttcacttca ggatggagtc 600  
cctcttctgg tcccagggt aagaggtaga tagaggccct gcaaggtact cattccttac 660  
taaaacaaga cccaagccc agagcccctg ccttccttcc agcctcttat ttctgatctc 720  
aacttctcag ncatccagag ccanttggg tgctgangcc ccctttaaaa agccccagag 780  
cccccccg 788

<210> 257

<211> 800

<212> DNA

<213> Homo sapiens

<400> 257

```

acaaaaatac ctggaaaaaa tatgggttat tactgaggaa atgtacgagt attccaaggt 60
ccgctcatgg ggcaaacagc ttctccataa ccaccaagcc actaatatga tagcattact 120
cacaggggcc ttggtgactg gagtagataa aggatctaaa gcaaatatat ggaaacaggc 180
tgtagtggat gtcattggaaa agacaatgtt tctattgagt catattgttg atggttcttt 240
ggatgaaggt gtggcctatg gaagctacac agctaaatcc gtcacacagt atgtttttct 300
ggcccagcgc ctttttaata tcaacaactt ggataataac tggttaaaga tgcacttttg 360
gttctattat gccacccttt tacctggctt ccaaagaact gtgggtatag cagattccaa 420
ttataattgg ttttatggtc cagaaagcca gctagttttc ttggataagt tcatcttaaa 480
gaatggagct ggaaatttgt tagctcagca aattagaaag caccgaccta aagatggacc 540
gatggttcct tcaactgccc aaaggtggag tactcttcac actgaatata tctggtatga 600
tccccagctc acaccacagc cacctgctga ttatggtact gcaaaaatac acacattccc 660
taactggggt gtggttactt atggggctgg gttgccaaac acacagacca acaccttgg 720
tcttttaaat ctgggaactg gggggacnag ctgtgtatga catagtcatt ttcagncata 780
ttcctggatt gacgggtttn 800

```

<210> 258

<211> 770

<212> DNA

<213> Homo sapiens

<400> 258

```

ttgcgtacct attgcggttc cttcacgaaa ttctattctg cttgcttctc tgttggctctg 60
ttgccacgca caacttaaaa tatcagatgg ctattagctg ttgcattcat gatgattaag 120
caaggataat tctagcatat tttttctcc atgtaagtga gttgctcttg cccctgagtt 180
gggccacaat ttaaaacaca agcaaataat cagcaccgta gaaaacaagg attcatacac 240
tccctcccca gcccccttc aaggcaaaat tgagtcttcc aaacatttat acagcgctct 300
gatttagaag gtcaataaag ttcgttgtcc ttcagtcaag ccatggcttt ataaaagttt 360
gatttcagat aaattcattc taatacagct tttttctta aagatttttc ccccaaaaaa 420

```

aactacaaag aaaagaaatt ataaaaatgt gaaccaaga cctacccatg ttaactcagc 480  
 tgtccagcca tagcaaagtg gacaagagtt tcaaatgaat cagccatacc cactgtaatg 540  
 tttaacaatta tgaaattaaa tcacaccacg ttcctatgat gcaactatat ctcccaatga 600  
 ggcaacgccc ctcagttaca ctgacaccat cattcacatt tggttattga tttcccttgt 660  
 gctaacgact aatgccaagc tatcctataa gcaggtncca ggtcaatttt ctttctttgg 720  
 atcggttaagg atggaaaacc atcggagact gnatcctcgn agtatgtctt 770

<210> 259

<211> 763

<212> DNA

<213> Homo sapiens

<400> 259

tgtagcgtg cacagttctg catacttgct tccccacc tgccaggaac aggttagtgt 60  
 tcccattct gcacacttct ttcctctcac ctgccgggat catgtagcg tacaccattc 120  
 tgcacacttt cttcctctgt gtacgtgtgt gtggttttcc tttcagaaat gggtcact 180  
 ctgtggacat ctttttccac ttaaagtgat ggcacagcca tttcccagt caagtaacat 240  
 gaatgtacaa gtttagcaaa cttcctcctg agagatggag agatcaaggc ttcgtctccg 300  
 tggcagccat ccgtgcacat gcatcactgt gcgtgagttg gtcccagtgg cttgctgaga 360  
 catgctctgc acaggggaga tttcttatac cagcagtgtg ggaggcagtg gggcaggtag 420  
 agccacaagt ggggatgagg gagcagagtc tagggcaggc tcctggatgg acaccagcta 480  
 cactgtctat tggatgtggg acttccctca ctgatgaaat gaataagaga atcttccctca 540  
 tcctgctgtt gttggcggtta aaacgggtta atgcatgaaa gcaacaaagc ccggcctgca 600  
 gacagcactt ggtaagtctc ctcttcccag catgttcaac aggaagccct cattccctct 660  
 agaatgtagg agtcttgcca gcantggctg ttgggtctct ggctgttgcc gacctgatga 720  
 gaacctaaaa atggggncct ctggatagat tnccttctta ttg 763

<210> 260

<211> 707

<212> DNA

<213> Homo sapiens

<400> 260

```
tacaaccatc cattcctctg cccttcctcc attcatccac ccateccctct gtctattctt 60
ccattctttc ctccatccac ctattcaccc atacaacctt ccateccccc atccatccaa 120
acatccatcc atccactgaa caaatccatg gcactgcccc actggccttc ttttatttcc 180
tctgtgaacc ccttctctcc tacctctgag ccttcacgta ctteccctcc cattcccata 240
tacacccta gggaatacct actcagctta agaaaagcct cacctaaatc ccagtctgaa 300
gtaggtcctc ctgctattcc tctcctgaag aacctcattc cctccttttc gacagttgtc 360
atagacatca ccaaagcttt gcttttgggt tgatttactt attcctgtct cctgaccag 420
actggaagct ccaagagggc aggcattagg tcttccttca gtgcctaccc cagagcctac 480
ctggcccaca gtaggggctc catagggaag tggatgaatgc tggcattgag tgaacttaga 540
aagtactgtg tgcagggcac aggcccagat gtcttgtcag gatttgcttc tgaatgtgac 600
tgctctcaa ggcttagcat ctatagaaag agataaagaa tgtgtatgca ggattgcaat 660
gcangatgcg actcaggaag gaggcangga gggatggcat ttnggag 707
```

<210> 261

<211> 795

<212> DNA

<213> Homo sapiens

<400> 261

```
atataccccc cttcccccat gttcctttat ctcaatgaat ggcctcagta atcctgaaac 60
caaggtcggc tgcattctct tctccctgc accctccagg agcaatccat cagtaagtcc 120
tatcagcgtg acaccgtgaa tgcctctcct cctcgttcc ttccagttgc cctgcctgg 180
tcacaggcct catctccct ctctggccca attggatgcc ctctgcttgc ttgcctcgtc 240
tctgactgta tcctgtgggt gacatgatg catacccggt accacttaa cccccatgg 300
gtccagggg cccacttgt ggtgtacaa gccactctat ccccttggcc ctgtgtccct 360
```

tccttttccct ctcttgctcc agccttactt gtaattcctc agttcacacc tccatcatgt 420  
 ctgtgagtct caagatctcc tagcccttct ccagacctgt tcaagacacc cctagccctt 480  
 ctccagacct gttcaagaca cccctagccc ttctccagac ctgttcaagt gcccctttca 540  
 tcaactcccca tgtgcagttc catagttgtc catttcacat tgacttccat gtatctggag 600  
 ggcaggagcc agctctgacc caccttgcca ttcccagagt accctctcag tgaatgtgga 660  
 tgggtccccc tgccttggtg ataagtcatt tgattgagca gatgggtgtga cttgcccctc 720  
 ttgcttgga ngtcattctgc ccagaacttg tgaangtgca gtggcctgag ccaggctttc 780  
 aagaggacaa ccggn 795

<210> 262

<211> 328

<212> DNA

<213> Homo sapiens

<400> 262

agaaagatgt gactactttt gacaacgcct caaacttttc taaccataaa agtaattata 60  
 ctgggtgagaa atcctagaaa tctgaagagt gagataaagc ctttaaattgg ttgtcacact 120  
 tcattgtagg taagataatt catactggag aaaacgccta catgtgtgaa caatatggca 180  
 aaacttaatg ctcacacttt attgctagga aagcatttat acttgagata aattatacaa 240  
 atataaagac tgtgaaaaag ccatcattat ctgctcacat ttactcaac accagagagt 300  
 tcctgcttaa taaaagcatt ataagtgc 328

<210> 263

<211> 879

<212> DNA

<213> Homo sapiens

<400> 263

gcatcattcc tttaattgag cagagttaac tggatcaaatt tatttatggg agagagagga 60

aaagttataa agaattatag taatTTTTaa ttccaccaa tatactcttt gtaagtgaat 120  
 cactctataa ttactttctg ttgcactgaa tgcagcaaca ataacacaat agtatTTTaa 180  
 ggcaactgggtt ttggcatac tctaaccttg taattattta aataacagcc aagtttactc 240  
 atgtttttga ttctgtcaag aaaaaaaaaa agttccttta ctgaaagtg atggccgaaa 300  
 cagaatcgga aatttgTTTT cttgaaatta cataaataca cagaaaatgg cacttattag 360  
 cttttgttaa aacattacct tacctaata ctcataaaa gtccagattt gtagaaaatt 420  
 gtaattttct cagtatctaa aactattttg cttccatta agtttctatt tgctattttc 480  
 tcagaatttt acaattaaag ataaatcaca aactgtttgt tttcttaaa gttctttgag 540  
 aaaatgtcta attatacaat ccttggacaa tactgtgttt ttttggtgct gtgtttttta 600  
 agaagtccta cttactggaa tttgactat ttgatattt ttgtttttta aaggggaggg 660  
 gaatttgctt aatacttcta aagatgtgaa ttgataattg atattaaaat agaattactc 720  
 tcaactcacc agaattaaat ttatatctg catatttaac actattagct catataaatt 780  
 ataagaaaaa ttttcaaagg actgggttta attttttga tatgaaatga attgcctttc 840  
 tgcctttctt aagactattt tgnacctata ttgcactac 879

<210> 264

<211> 693

<212> DNA

<213> Homo sapiens

<400> 264

acactgcgcc gcggctgcgc agtacacggg aggcttttaa ttccattgtg gagaggacgg 60  
 cgttatTTTT attaaactgga ggcgacggcg gctgcggcgg cggcgggacc cgcctcctcc 120  
 ggggtatgaa aatcggcagt gggttcctga gtggcggcgg aggtaccggc agtagcggtg 180  
 gtagcggctc cggcggcggt ggtagtggcg gcggcggcgg cggcggcagc agcggcagga 240  
 gggcagagat ggaaccaccc tttccccagg gtatggttat gttcaaccac cgtcttcccc 300  
 cggtcaccag cttcaccggg ccggcggggt cggccgcccc tccccgcaa tgcgtgttat 360  
 cctcctctac ctccgcagcc ccggccgctg agcccccccc tccgcagccc cggacatgac 420  
 tttcaagaag gagccggcgg cgtcagccgc ggccttcccc tcgcagagga cctcctgggg 480



gttcttgcag tcttttggtta gcatcaaaca ggagaaaccc gcggatcctg aggagcagca 540  
gtcccaccac caccatcacc accaccacta tggggggctg ttcgctggag ctgaagagag 600  
gtctccaggc ctaggaggcg gtgaaggggg gagtcacggc gtcattccagg acctcagtat 660  
tctncaccag catgtccagc ancaaccagn cca 693

<210> 265

<211> 809

<212> DNA

<213> Homo sapiens

<400> 265

tctgggtgat cttggcaaac taacttctga gcttctgtgc attataggca ttcagcacat 60  
attcgttggga tgaaaaatac ttttcttgaa agtttatgaa gttgtaggat gcccagcagc 120  
ccccctttct ctatttcctt cctcttgaag caagcgttga ctatacctct ttcctaacc 180  
cttagtgtac catagcttct tccaacctct ctccaatcca ttactttttt ctgagctacc 240  
ctgtctcaaa tctaactcag gcctttttgc aagaggaagt ttaagccatt gtttactcat 300  
taactcactt gacccttaga acaatcgtgg gaggtgttta ttcggaaag gaagctaaag 360  
cacaggacag aaaaataagg tcatagcgtg aactagtaag tagcagaact gggaacatag 420  
gactgttatt ttcaaact cttaacttca ctgcagttgc aaatttgcaa ccaaaatggc 480  
cgccttgaaa gggctctttg cagtaaaatc tcagtgtcca acatcaaaga cagttcttca 540  
gggcctccaa ttaactatac atcctgcccc cagctgctca tctctgcacc tctaacacgt 600  
acttcacaga gtaggaaatt gggctttctc cttcaaaaag aaaagtagag aaggcctgag 660  
ggcagtgtaa ttaaaatggg agaagtagag accacgaatt acttgatga attcataact 720  
gggtggtctc tgaggcangg attattattt ttcttgatt ttaagcntaa aagtagtgat 780  
ttttgcattg gtacaaaaa caaaatngc 809

<210> 266

<211> 800

<212> DNA

<213> Homo sapiens

<400> 266

```

aacaggcacc gctgcgggga ctggagtcgg cggagaaaac cggggtcccc agcgctgggg 60
cccgcggcgc catggctcac gtcggctccc gcaagcgctc gaggagtcgc agccgggtccc 120
ggggacgggg gtcggaaaag agaaagaaga agagcaggaa agacacctcg aggaactgct 180
cggcctccac atcccaaggt cgcaaggcca gcacggcccc tggggcggag ggtgaggacc 240
acaggcatcg gggagaggag gcgcagttac taccggggga agtcgggcga gcagtggctc 300
gggacgctca gtcatgcctc tgtgcagccg ggcctgagat gtgagggcca ggcgccgcag 360
gagccaggaa ggggctcctc tgggaagctc catctctgtt ctggaaagcc cctcaggaag 420
cgctcacctt gtagccggcc tgtgcctgcc ccaggccaga gcaggggacg aaggtttacc 480
tcttcccctc ctggctttcc agcctcacct tctccctgca tcacagagag aagcaagcag 540
aaggcccgga ggagaacaag atccagctcc tctcctctt cttccagttc ttctagctcc 600
tcttcttctt cctcgtcctc ctctcttcc tccagtgatg gccggaagaa gcgggggaag 660
tacaaggaca agaggaggaa gaagaagaag aagaggaaga agctgaagaa gaagggaag 720
gagaagcgga agcacagcag gtggangctt ttgccgggcc ccttngttgg accagtggca 780
ccgatcaact tgggnaggaa 800

```

<210> 267

<211> 829

<212> DNA

<213> Homo sapiens

<400> 267

```

agctggcgtc agggacttcc tcgggctccc taaggacctg ctctcccagt tctctactct 60
tccctctgag gcagaggctg ggcaggacct acaggcagcc cttagtgacc cgcactccac 120
accctgtctg ccttaggaga aatggggtct gtgaatctgg gctctcctc catgctgccg 180
tgtctgcgga gccaggtgcc ggcgtggcct ctgctagcca gcagagtga catgcacagc 240
tgggtccaggg cacggtgttt tgtttgcact gttccagaca tcgtcatctc catctgatga 300

```

tgatcactcg gcagctttga gccctggcac agcttcgggt cgaagcacgt tcccttttca 360  
 ggagagttag gccgagcttt ccttcacgca gacttaattt cctggactta gtgctaacgt 420  
 caagacaaaa cctgtaggaa aagagcttta actacacaaa cacatactga cagattcagc 480  
 caaactccga gagtcccaga ccggagcctg tgtccctagc gcaggtgtgt ctgtcgggca 540  
 gccgacgggtg cctgtgcagg cagtggctgg acaccactac tcccttctct tccctccctg 600  
 cttgatcgcg ctgtgggatt cctgatgctg tgtgggtctc tggctcccc tgctgtagaa 660  
 ngggagtact ggccctggga cacagaactg caaggccagt ggcgccaggt acctccaca 720  
 ggaagaagat ttgaggacat ttaaaggtac ccacttttac ccgtgccacc ttctacccca 780  
 gttcctggca gncatccaaa atttgnctcc aagacatgtt nacagacaa 829

<210> 268

<211> 847

<212> DNA

<213> Homo sapiens

<400> 268

tacgaatgtg gccggtgtgg gcgagccttt actcacagct caaatcttgt tctgcaccat 60  
 cacattcaca ctggaaataa accatttaaa tgtgatgaat gtgggaaaac ttttggactc 120  
 aattctcacc tccgtcttca tcggagaatt cacactggag aaaaaccctt tggctgtggt 180  
 gagtgtggga aggctttcag tcgaagctca actcttattc aacatcggat cattcacaca 240  
 ggagagaaac cctacaagtg taatgaatgt ggaagaggct ttagccagag cccccagtta 300  
 actcagcatc agagaattca cactggagag aagccgcatg aatgcagtca ctgtgggaag 360  
 gccttcagtc gaagctccag ccttattcag catgagagaa ttcacactgg agagaagccc 420  
 cataaatgca atcagtgtgg gaaggccttc agtcagagct caagcctttt cctccatcat 480  
 cgggttcata ctggagagaa accctatgta tgtaatgaat gcggcagagc ctttggtttt 540  
 aactctcacc ttactgaaca tgtaaggatt cacacaggag aaaaacccta tgtttgtaat 600  
 gagtgcggca aagcctttcg tcggagtcc actcttggtc agcatcgaag agttcacact 660  
 ggggagaagc cctaccagtg cgttgaatgt gggaaagctt tcagccagag cttccagctc 720  
 accctacatc agcgagttca cactggagag aagccctatg actgtggtga ctgtgggaag 780

gcctttancc cggagggtcaa cccttantca gcatcagaaa gntcacagcg gagaaactcg 840  
taagtgc 847

<210> 269

<211> 848

<212> DNA

<213> Homo sapiens

<400> 269

aaactagaat aataaaaggg aaattataat attcacaac ttgaagcaca ctggaattct 60  
gctataaatg ttgttatag aatagaattt ggtgcagggt gaatttgatt taagagggtt 120  
taaattatat gaactgtgtg aaaacattta gatctaaggc tgaaaacaat tatcaactca 180  
atgaaatttt aatatggtat ttcacaactg tgacttcatg acagctgtta caagtgtcag 240  
gaatggtaaa tatgtactat ttactaatgc caacactgta cagaagtgtt ttatatacaa 300  
taaactcattt attactcaca gcaatcctta ccagtagatg ctatttctat ctgagggttg 360  
tggttaagga aaaagagtga actgagtaac tggtgtgagt tcactcagtg agtaagtacc 420  
agagcgttgt caagagaacc aagtgtagca tccttcgtac catagtcaca gtcctacagc 480  
agaaatttaa gagagcatca agagagatgc ttgcttacc gctttgtatt tacttgctct 540  
ctgagaagtc tacttctcat ttatttctgg aacacaatta ggtaaactct atctatttca 600  
aatgttctct tcagttgtct agtttgaagc ctttgaggat tagcaccttc cagtttattc 660  
aagggaattg gacaaagaaa tgagaatgaa ctataggatt aaaggataaa actaaagaan 720  
gtgagttaga agagtttgag ttcattggcg cagatttaac atanaataat cgaataatta 780  
gtaggcataa aaaggnggat atcgacctaa ctagtagcct ggganaaatg gggatttggc 840  
taaactca 848

<210> 270

<211> 831

<212> DNA

<213> Homo sapiens

<400> 270

ttaataactct	tgacaaaagt	atgagtggat	atctctcagg	ttttcaagct	agaaatgccc	60
ttcttcagtc	aaatctttct	caaactcagc	tggctactat	ttggactctg	gctgacattg	120
atggtgatgg	acagctaaaa	gcagaagagt	ttattcttgc	aatgcacctt	actgacatgg	180
ccaaagctgg	acagccatta	ccactgactt	tacctcctga	gcttgttcct	ccatctttca	240
gaggaggaaa	gcaaattgat	tccattaatg	gaactctgcc	ttcatatcag	aaaatgcaag	300
aagaggagcc	tcagaagaaa	ttaccagtta	cttttgagga	caaacggaaa	gccaactatg	360
agcgagggaa	catggagctg	gaaaagcgac	gccaagcctt	gatggagcag	caacaaaggg	420
aggcagaacg	taaagcccag	aaagaaaagg	aagagtggga	acgaaaacag	agagaattac	480
aagaacaaga	atggaagaaa	caacttgaat	tagaaaaacg	cttagagaag	caacgggaat	540
tggagagaca	acgagaggaa	gaaaggagaa	aagacataga	aagacgagag	gcagcaaaac	600
aggaacttga	acgacaacgt	cgcttagaat	gggagagaat	tcggcgacag	gagcttctca	660
atcaaaagaa	tagagaacaa	gaagaaattg	gcaggttaaa	ctctaaaaag	aagaatcttc	720
atcttgagtt	ggaagcactg	aatggcaaac	attancagat	ctcangcagg	actttcagga	780
tgtnccgact	tcaaaaagca	aacttcaaaa	agactgggcc	ctggaagttc	t	831

<210> 271

<211> 783

<212> DNA

<213> Homo sapiens

<400> 271

cttacgagcc	cacaggcccc	ggagtagcag	cggggaggcc	gggagcccgc	gggccggagc	60
cgcccggccg	aggcgtgggg	gctgcggggc	cggcccatcc	gtgggggcga	cttgagcggt	120
gagggcgcg	ggggaggcga	gccaccatgt	tcagccagca	gcagcagcag	cagctccagc	180
aacagcagca	gcagctccag	cagttacagc	agcagcagct	ccagcagcag	caattgcagc	240
agcagcagtt	actgcagctc	cagcagctgc	tccagcagtc	cccaccacag	gccccgttgc	300
ccatggctgt	cagccggggg	ctccccccgc	agcagccaca	gcagccgctt	ctgaatctcc	360

agggcaccaa ctcagcctcc ctcctcaacg gctccatgct gcagagagct ttgcttttac 420  
 agcagttgca aggtaacctc cgaggctatg gcatggcatc cccaggcctc gcagccccc 480  
 gcctcacacc cccacaactg gccactccaa atttgcaaca gttctttccc caggccactc 540  
 gccagtcctt gctgggacct cctcctgttg gggccccat gaacccttcc cagttcaacc 600  
 tttcaggacg gaacccccag aaacaggccc ggacctnctc ctctaccacc cccaatcgaa 660  
 aggattcttc ttctcagaca atgcctgttg aagacaagtc agacccccca naggggtctg 720  
 aggaagcccg canaagcccc ggattggaca caccagaaga ccaagattta ccgncttgcc 780  
 aaa 783

<210> 272

<211> 775

<212> DNA

<213> Homo sapiens

<400> 272

aacactacaa aattttcaag cacagcctat cggccataga tagtatcaac tagaggcaat 60  
 gtcttttagtt tttattatit ttgaacctgg agcattttct gttggacgtt acaggatctt 120  
 actgctttaa atcatacatt attaaaaaa atgagggttt attctttgaa ttaccctttt 180  
 gtatgcagga gtgaagactg cttttttagt tgaccattca aaatcgttga attttagttt 240  
 ttgcagacta ctaaaatttg cagtgacttt ttttttgtaa ggggggtaaa tgaaacattt 300  
 agcagccttt gaaatcagca agttgcttag atagtacttt agattttgaa actgaatata 360  
 acagtgttag aaaagtatgt gtaaggaatt gtatttacct gcatactagt agtacaatac 420  
 ttatagctga atttggttgg caaaagtatg ttttcatttt attacgactg ctagtcaggt 480  
 aagatatggt gggattcttt ctgtagtgtt ttcagtgtct gggcaagggg aggagctcgc 540  
 ctgtgttata tgaggggtta ataccaatag gataggaaca gtttttagac tgtaattgt 600  
 gaattttaca tttgggtcat cactgttgtg tagatttggt cacctattaa aataatgaaa 660  
 accctcattt gagtgtgtgt gtgtgggtgg atcataggaa ttgatttgtg gagtgatctt 720  
 tcaatagcac tgaagacaga antttggtat ttggnatagn ctacaccaa gctta 775

<210> 273

<211> 783

<212> DNA

<213> Homo sapiens

<400> 273

```

gcatcgagta atccatgaat gggaagatgg ttcccaggaa cattcaccca gcaacaaaaa   60
aattaaacac aaattggggc ttgaattttt gtggcaatca atgactgaaa aaaaaataga   120
aaaaagaagg acatgacctt tttaaagaca aatgaagact cattttcagt aactagagtc   180
ttaaaaaacta ttttaatctg aatgcagatc attgtttacc cacagagagt tttatgacaa   240
tgatttcact gacatgcaga atcaaatatt atgatcacca ccagcagcca aaaaacccta   300
ttctttgccc aaggagtagt agaaatgtag actagacaga caaacagggt ctcttatttt   360
gcctcattag tgccacactc tatacaacta cagtcacgaa ggggtcacat ttggttataa   420
ttactattag aataatatgg gagtgtgatg tttgtggtgg aaacttgccc atgacttatg   480
taaccatttc tgctgacaaa ttttaggatac taaaaacttt gtgggttttt ttgttttggt   540
tttgtttggt tgtttttggg acagtctcgc tctgtcacc aggctggagt gcagtggcac   600
ctccgcctac agtgttcaaa cgattctccc acctcagcct tccaagtagc tgggaccaca   660
ggcacacgtc accatgccct gctaattttt ttgnattttt agcagagatg gggtttcacc   720
atgttggccca ggctggtctc aaactnctga cctcaagtgg cccctgctna gcctccaaat   780
gct                                                                    783

```

<210> 274

<211> 800

<212> DNA

<213> Homo sapiens

<400> 274

```

ttttttccag aaataacttg agacttgaag gaattatcag tctttcattt tctatcatca   60
gtgtcctatg atagtttgtg ctccctccc tcatcccttt gttcatgtca ctctgttcac   120

```

caaccactc tgctgaaatg tcgttatitc ttcaaggccc ggaggaaatg ctaccactct 180  
 catcagaggg ttcagagatg ggcagtgaga aggagcagag tccagaacca cacctgcctg 240  
 aggaagggga agggggtaag ccttgagagag tggatgactc agagggttct tggatccac 300  
 ctggggagaa ggagcatggg caagagagcc tgtcggatga actgcaagaa actcatccaa 360  
 aaaagccatg gcagaaagtc actgcccggg ctcgagagct aggggacccc attgctcatc 420  
 caaggcatga ggcagatgag aagcccttta tatgtgccc gtgtggcaaa accttcaata 480  
 atacctccaa cctgagaaca caccagcgga tccacactgg tgagaagcct tacaagtgtt 540  
 ctgaatgtgg caagagcttc tcgagaagct ccaaccgcat ccggcacgag cggatccacc 600  
 tggaagagaa acactacaaa tgccccaagt gccaggagag ctttcggcgg cgctcagacc 660  
 tnaccagca ccagcaagat cacctaggca agcggccata ccgntgtgac atctgtggca 720  
 agagcttcag ccagagtgcc cgctagctgt gcattaccgg acccacctgg agcccagacc 780  
 ctacatttgg ttgngaant 800

<210> 275

<211> 865

<212> DNA

<213> Homo sapiens

<400> 275

acttgcactt actcatcttc tagccttatg accaggaacc ttgttttgg gctcaagtac 60  
 acatcctgat ttggtttctc cctgttgtaa tttagatatt cccaaattaa gtcttataat 120  
 gattaggttt tgttctgagt tatttctaga gaaagaaagt attttagtat gtgtaaattg 180  
 tacaataatt tttttgctgt tgtactcact gctaatagtg gattgtatag ggtgggtgtt 240  
 ttatttcatt tattgtagac aaaaataatg aatttagtat acacataccc actaattcaa 300  
 gtatgtcaga gcacaaagtt ggcagctggt tatatttaaat tcagcccctc tgaaaagcac 360  
 atacagtcta tactttgttt ataaatatcc taggtcctcc ctgcccctaa atatatattt 420  
 tggatgaagct gtggtgcact attaatitc tgtttcaaaa tgcaatctaa agatgcaata 480  
 aatatgatga ccttgatagt tttaatgaaa tcttcaattc ttgcagctgt gttttggaaa 540  
 gtgattaagc aatatttctc aaacctgatg attcttggat atttagctat tgtcctccaa 600



agagtcacgcg ttccacgttt tcaaaccatgt gctttgtgct gaagattctt gtcagatata 660  
 ctgtgcttcc agagtatttt tatcttcaat tttatttaat ttgnttcatt ttgntttcat 720  
 aagacaatgt ttcagatatg taatggggca aaccactata gatttctggt ggatagaaaa 780  
 atgaaatggt actaataagg ttaaaatgac ccttcgttga ctatcaagta ctggatgatcc 840  
 tttanttaga atgnatgtct canaa 865

<210> 276

<211> 775

<212> DNA

<213> Homo sapiens

<400> 276

gttacttaag aactctttgt gtcgcctctt ctaatggcac caatgcctcc catcaagcct 60  
 taaacctcac cttaaattatg tcattgggct ttttcatcca taaatgagca taccagggtgc 120  
 caagggaatc aatatgccat ttcacatgcc ttagaccagt gtccaaagaa agataaaatg 180  
 ttattctata aaagctttct cccagcattt ctattccttt acattttgtg ccatatacaa 240  
 ctatggtttt ttaatgatct tatttctgac agctgttttt cttcagaaca tcaacagctt 300  
 ctttcctaaa ttagtttttag tatgagttcc atttctaatt agtcaaatt aaagtcctag 360  
 agagcagcga ggtaatatat aaacctcag gctaaaattt cggagtaggt gcagaatgtt 420  
 gactctaaat gagtttttcc tgtgacataa cagcatgaa agcaggattt ctttcatgtg 480  
 tgaaatgtct taaatcagac ttaccctttg tgattctctt ttagctttaa atgtcattta 540  
 agaagaaaaa agaaaagaaa attaagcatg acattcccca atatcctctg ctcactgtgt 600  
 tataatccct atcactccac aagtgaattg gagagagtga agacacaatg aacagaaact 660  
 tncctgagct tcacaganga gtgtctccgg gaccacacag ccttcacat gtccatctac 720  
 gaaggctgtg gcaagccata tccacaaagg atgcctgnnt cctgncttct cgggt 775

<210> 277

<211> 891

<212> DNA

<213> Homo sapiens

<400> 277

```

gataacattt agtaatttag gagagaaaat taaaggcatt gttgaaaata tgggaatcaa 60
cgcaaataac atgagtgact ttattatgaa agttgatgcc cttatgtcct ctgtgcctaa 120
gcgtgcatct cgatatgatg tcacatttct tagggagaat cacagtgtta taaagacgaa 180
tcctcaagag aatgatatgt tcttcaatgt cattgctatt gttgatccat taacaagaga 240
agcacagaaa atggcacagt tgttggttgt acttggaag attatcaaca tgaagataaa 300
gttggttcatt aactgtaggg gcaggctttc agaagcccct ttagaaagct tttaccgttt 360
tgttctggaa ccagaactga tgtcaggggc taatgacgtt tcttctcttg gaccagtggc 420
aaaatttttg gatattcctg aatcacccct cctaactctc aacatgatta ctccagaagg 480
ctggttggtt gaaacagtgc acagcaactg tgacctgat aatattcact taaaggatac 540
tgagaaaact gttacagcag aatatgaact agaatactta ctactggaag gacaatgctt 600
tgataaagtg acagaacagc ctctcgggg tctgcagttc acactaggca caaaaaataa 660
acctgctgtg gttgatacaa tagtgatggc acatcatgta agtattattt aattgatggt 720
gtttaatttg atgtttggtg aattctcttg tttcctaaga gtaaaatgaa ataatcttta 780
ttctgctgtg ctgaacagtt tgcagaaaac aaaattgatc tttgataaga taaataaaaa 840
tggggaaaat catactttaa taattttgaa nggtatggaa aactcttact t 891

```

<210> 278

<211> 813

<212> DNA

<213> Homo sapiens

<400> 278

```

aagaggctgc gcgctgctgt ttggggaggg ggtgtgtgga gccgggtcct gtgtccgcag 60
tggtgctgtg cgggggggtcg cctgttcgag gaggtgcgga gagactcctt ggggggtcgag 120
cactgtggct ggcatgcccc agtgttttgg ataccaatgc ataggactcc atagtaatcg 180
aatttaccag aggcgaacgt catgagcata gtgatcccat tgggggttga tacagcagag 240

```

acgtcatact tggaaatggc tgcaggttca gaaccagaat ccgtagaagc tagccctgtg 300  
 gtagttgaga aatccaacag ttatccccac cagttatata ccagcagctc acatcattca 360  
 cacagttaca ttggtttgcc ctatgcggac cataattatg gtgctcgtcc tcctccgaca 420  
 cctccggctt cccctcctcc atcagtcctt attagcaaaa atgaagtagg catatttacc 480  
 actcctaatt ttgatgaaac ttccagtgt actacaatca gcacatctga ggatggaagt 540  
 tatggtactg atgtaaccag gtgcataatg ggttttacac atgatgatgg atacatgatc 600  
 tgttttgaca aatgcagcgt ttggcaacat attgactgca tggggattga taggcagcat 660  
 attcctgata catatctatg tgaacgttgt cagcctagga atttgataa agagagggca 720  
 gtgctactac aacgccggaa aagggaataat atgtcanatg gtgataccag tgcactgaaa 780  
 ntggtgatga aggtcctgng gaattatata ctg 813

<210> 279

<211> 842

<212> DNA

<213> Homo sapiens

<400> 279

ccaaaatcca atagggcagt cattgagcct taaagtcca aaatgatctc cttagacccg 60  
 atgtctcaca tcgaggccat gctgatggaa gaggtgggct cccatggcct tgggcagttc 120  
 caccctctgt ggctttgcag ggtacagccc cctcatggc tgctttcatc atgggctggc 180  
 attgagtgtc tgtggctttt ccaggcacac ggttgcaaac tgtaggtgga tctaccattc 240  
 tggggctctgg aggatgggtg cctctctctc acagctccac taggcagtgc cctagtgaag 300  
 cctctgtgtg ggagctccag acccacattt ccttctgtga ctgccctaac agaggttctc 360  
 cttgagggtc ctgcgcctgc agcaaacttc tacctggaca tccagggatt tccatacatc 420  
 ctctgaaatc taggcagagc tttccaaatc tcacttcttg acttttgtac accaccacat 480  
 ggaagccatt agggcttggg gcttgcaccc tctgaagcca tggcctaact ggaccttggc 540  
 cccttttagc catggctaga gcagccggga tgcagggtac catgtcccaa ggctgcacag 600  
 tgcaaggggg actgggcccc aaccacaaaa ccttttttct tcctagtctt ccaggcctgt 660  
 gattggaggg gctgctctta aggtctctga catgccctgg agagattttc cccattggct 720

tcgtgaataa cattcatctt cttggtatctt aagcaaattc tgcancagga ttgaatttct 780  
 cccanaaaat gggttttctt tggcatcatt aggcctcaaa ttttncaaac tttcatggtc 840  
 tg 842

<210> 280

<211> 862

<212> DNA

<213> Homo sapiens

<400> 280

acagtctcca ctgaaaggct aaatgggagg atcttccccc gtgacctcaa aagctattgt 60  
 ggatgctgat ggaagaattt atattcgga ctggcagggt ggcatcctgt ctgggggctt 120  
 tgagaagaac ccgaaaccaa ttttactga gggcaagaac cagctggaga ttcagaatct 180  
 acaggaagac tgggatcact ttgagcctct gttgagttcc cttctgagga ggatgccaga 240  
 attagagact ctggagatca tgaagttggt gaactgccca gagaccttca caccagacat 300  
 gaggtgcac atgggcgagt ctctgcagt gcagggttac tttgtcctgg caggaatgaa 360  
 ctctgctggc ctttcatttg gtggaggagc cggaagtag cttgccgaat ggatggtaca 420  
 tggttatccc tcagaaaacg tttgggaatt ggacctgaaa cgttttggag ccctccagag 480  
 cagccgcacc tttctgcgcc accgggccat agaagtcatt cctttgatgt atgatctgaa 540  
 ggttccccgc tgggacttcc agaccggtag gcagttacgc acctctctc tctacgaccg 600  
 gctggatgca caggagacca ggtggatgga gaaacatgga tttgagaggc caaagtactt 660  
 tgttcccccc gacaaggacc tcctggcatt ggagcagagc aagactttct ataagccaga 720  
 ttgnttgac atcgtggagt ctgaagtcaa gtgctgtaag gaagctgggt tgtcaattga 780  
 catgtcctct tttacaaagt ttgagataca tnccttggg atcangcctt tanaagttct 840  
 acagtacctt tttttccagg ga 862

<210> 281

<211> 842

<212> DNA

<213> Homo sapiens

<400> 281

```

acactgactt ctggacgtgg tcagggtggc tttctctggc tggcatggac ttgagcagaa 60
actcattgcc ggcttcctcc ttgcacgagc accaagtgat tcccaggtec cccatcctcc 120
cctgggacat cgaggacaca caaaaacctt gttcacctc cactgagagc ggggctagag 180
atggatgctg agtacaggaa ggggtgtgtga ggattccttt ggctccactc ttgtttccaa 240
ctattgctgg tcctaggcgc ccagtcctga gcaaccatga cgatggagac tctccccaag 300
gttctagagg tcgatgagaa gtctccagaa gccaaggacc tgctgcccag ccagaccgcc 360
agctccctgt gcatcagctc caggagcgag tctgtctgga ccaccacccc caggagtaac 420
tgggaaatct accgtgcccc tggacatgac aacatgactc taggggttag tcagctgaag 480
aagtttagtt cctaattata taatatttac atcagaggca gtggggtagg ctaggggatg 540
tcaactgtttc cgcttgacct tatctttctc attgaccact gtcttctctg aacttgatca 600
ttagccaagg acaaaatgca tgttgcccta atttctttcc taccctgcc tctatctctg 660
catctagaac agctaaatgg aaagatacag aggatcctg taaggttggt ttccttttac 720
gtccatcaag atcaaaattg agagaatcaa gtccatata tgaatgatct ggaggttcta 780
gagatggaat taggaaactg gacnggcatt gncctgacct nccagagggt ttacttcac 840
ct 842

```

<210> 282

<211> 856

<212> DNA

<213> Homo sapiens

<400> 282

```

cggtaatcaa acccaattat atcagaatac ctttctgaat ttgagatfff tgctctacat 60
tttataatga ataaggctat ttttgaagg tatttcattt tgaattctgt cattaacctc 120
aaaagctttc tactgctttg cggatgaaggc aaaatattcg ataactcaac ttaggccccca 180
ctgttccccca acttcatgga ggccagaaga ctttactttg ttccataatg aaatataaac 240

```

acagaacaaa gttgtaaaag tagcatggat atgttgaaac tttggacaag cttcttgtcc 300  
 tttggaatat gggatttata ttcattctct caatatccca tgtatgcaca gaaacttcag 360  
 ttctattttct atagacacag gaacctagtg actattgaac gtaattgtaa taaaatgctg 420  
 ctcattgagc caaagagaag aaatgattta ttaacatggg gacaccaaga aaaacaaagt 480  
 atgcttttat tccctttgtc aagctcagtt ttagggtttt ttcttttttt tatagtgcaca 540  
 atccatagat atagacattc ctaaaagaaa aataaataat tcagtagata tatgtcactg 600  
 ttacctgaat atggaatgaa tttgatgttt tttattttgt tgagacaggg tcttgctctg 660  
 tcaccagac tggagtgcag tggcatgac acacctcact gcagccttgg cctctcangc 720  
 tcgtgatcct cctgcctcaa ccctcgcaag tagcttggga ctacaggcgt gtgccaccag 780  
 tcctggctaa ttttttgnag atataagggc tcatgatatt gnccagctga attgaggtat 840  
 ttaagtgant ttcatg 856

<210> 283

<211> 735

<212> DNA

<213> Homo sapiens

<400> 283

agtggaacat ggcgacttgc gccgaaatcc tgcggagcga gttccccgaa attgacggac 60  
 aagtcttcga ctacgtgacc ggcgtcttgc acagcggcag cgcggaacttc gagtctgtgg 120  
 atgacctggg ggaagctgta ggggaactat tgcaagaggt gtccggggac agcaaggatg 180  
 acgcgggcat cagggccgtg tgccagcgca tgtacaacac tctgcgtctg gctgagccac 240  
 aaagccaggg aaatagccag gtgctactgg acgcccctat ccagttgtca aagataacgg 300  
 agaactacga ctgtggaacc aaacttccag gactgctaaa gagggaacag tcctcgacag 360  
 tgaatgcaaa gaagttagag aaggccgagg ctcgacttaa ggcaaagcag gagaagcgct 420  
 cagagaagga cacgctcaag accagcaacc ctctagtctt agaagaggca tcagccagcc 480  
 aggcaggcag cagaaaggag agtcggttgg aatcatctgg caagaacaaa tcctagtcgt 540  
 ctcccacgac cgcaacttct tgaatgccat cgccacagac atcatccacc tgcacagcca 600  
 gcggctagat ggttaccggg gagactttga gaccttcac aagagtaagc aggagcggnt 660

gctcaaccag cagcgtgaat atgaggcgca gcagcagtat cgccagcaca tncaggtttt 720  
cattgaccgg nttcg 735

<210> 284

<211> 862

<212> DNA

<213> Homo sapiens

<400> 284

atataatgct gtattcattg atcatatttc tgtatttaaa taagtacatt ttttaaaaca 60  
tcataaagtg gatcagtaat gctgtaatat cacatttcat gtattataca acatttttga 120  
aatggagtag tccaaagtaa tttgcttctt atggttacca aagtttaaag aataccctaa 180  
catgcactcc aagattttta gaggaaggc tttgtgtttt tcattactgt attatgaaat 240  
ctgagagtgc aaaactagtt ttcttaggta aaccccgtaa tcagtttcca catttacctg 300  
taaaagtcag tggagggcat acatctggaa gtagtagtg cggtacacaa tgtgtgttaa 360  
tatgatttcc aaggggtacc tagagtaaac tttcttaatc acagatctga tctgagcatg 420  
ccactccttt cttaaaatct tttgttgatt ttccatttcc ctaaaaggaa ggcccactgg 480  
agcatgggcc ttgcaaagtc ctctttctgg ctctgcctg cctgcctttt cagcttcac 540  
tctgccaatc tccctgaatg aacttttgc agtggcctg ctctttctac ctatgagatg 600  
ttgtttctgc atgttcttgc atggaattct ctctctccca accctgttct attcctttta 660  
tctgtacaac tctttcttat cctgaagtct ttatgttaag gttgcctttt caggaagact 720  
tttaattgna ttagctaatt aattaattaa tagtctgagg tatttggagc tgagattcta 780  
tggggattag ttgctggagg tagnttagag ccngatgcga aggctttcta aactgngctt 840  
tcaaggtttg aacaggaaat ga 862

<210> 285

<211> 839

<212> DNA

<213> Homo sapiens

<400> 285

tatggatatg cttattaatg cacttgtttc aaaatcccaa attgcacaaa tgtgttaata 60  
 ttttaagaaa caaaatgaat cctacaagga gaatgatttt tagccacaca tagggttgga 120  
 tcttgagagt gacctacaga ataaaagtac ttttaaaata aagtagtcag aggctattca 180  
 aagggtaaaa taatcatagt accacattgg tccacttgac actaaccaat cgatcatttt 240  
 tttttaatca agaaagctag attctatcag ataaaatcac tgcttctaaa gagtttaaat 300  
 ctagttagaa aaagttatag aaatgtttgc aaagataagt aacagataga gtcagtagag 360  
 gataagatca aaaacaaaac caagcaaaag atgagttcag gggagtttgc catcaagttg 420  
 gcaaaactga ctacttagg gaagaaagtt ataaaacagg aaaatatgag atgaaccttg 480  
 agtgatgtgg aagatttaga taaatggaaa ggaaggagaa aatggagttc tttaggtggt 540  
 tgtaattgga ggaggaaatg aatacacaca tcttgttgac ttaaaccag acattcagca 600  
 gctctctata catatctgga aaagactgca cagtcacctc ctgtctctca ccccagggtat 660  
 tacttagaat tattatcata tttcccttcc tttaaagtaa gtaagggtga ttggtggcca 720  
 atatgggaga actatggatt tttccattac ctaataataa ttgggattta ntggggtctg 780  
 gttaagcatt ttccttatta actcctttaa gccttttcaa cagcccttgc naaataggg 839

<210> 286

<211> 855

<212> DNA

<213> Homo sapiens

<400> 286

gtttgaaatg ctggtagttc ctgaacagga gtacccttta gtttgtgttg gtgtcagtag 60  
 aggtagagac ttcaaccaag tggttcgatt tgagacggtc aatccaaatt ctacctcttc 120  
 atggtttaca gaatcagata cccacagac aaatgttact catgtaacc aactggagag 180  
 agataccatc cttgtatgct tggactgttg tataaaaata gtaaactctc aaggaagatt 240  
 aaaatctagc aggaaattgt catcagaact cacctttgat ttccagattg aatcaatagt 300  
 gtgcctacaa gacagtgtgc tagctttctg gaaacatgga atgcaaggta gaagttttag 360



atctaagtag gtaacacaag aaatttcaga tagcacaaga attttcaggc tgcttggatc 420  
 tgacagggtc gtggtttttg aaagtaggcc aactgataac cccacagcaa atagcaattt 480  
 gtacatcctg gcgggtcatg aaaacagtta ctgagaattg ttgtgctttg acagttaact 540  
 ctgaaagaa agaacactac cactgcaaca ttaatggatg cttgaagctg tacaaaagct 600  
 gcagtaacct gtcttcagtt actttgtaat ttattgtggc atgagataag atggggaaaa 660  
 ttttgnttta agtgggtatgg atatatttag catattgaac cacacaagtg ctttaattcat 720  
 tggtagtaaa tctttgtaca tataggcagt atttttctg ngaaacttca tattgctgaa 780  
 gacatacact aagaatttat gtangatatg nacttttatg agatgtacaa gtaagtggct 840  
 tatctgtaca gatgt 855

<210> 287

<211> 851

<212> DNA

<213> Homo sapiens

<400> 287

aaaataattt ctaggttaag ttggaaacat gtgataacat taaaaaattt aaaatgtctt 60  
 tgggcctgaa agattatgcc ttacattca acatgaaatc catggatgga gtttatataa 120  
 ataaccatgt aggcttacca atccttaacc ctcttgatg agtccatact cacatggata 180  
 ttccatatac cacttttact cttgtgtcaa aagacaaaat taaaactcat ttagttatgt 240  
 atctaattgg cttttattct cgattcatga atcggtgcag cctccattct aatagaatca 300  
 cagcttctac tgggcaatgg cagactattg ggttttgtga ggtgggaatg aggaaacata 360  
 acaatgggga aaataagctg attagttaac aatagattac ttcagtttac ttttttttta 420  
 taagggttaa agcagagggg actttcttgt tctgactcag gtaggctaga atctcctggt 480  
 tttaggaaaa actcgtctgt tttgggatct atctgctttc ttacagttgc agtttgatta 540  
 tatgacattt ggcatgagtg actccacttt gtttaacatt gaaaggttat tattcccata 600  
 tggagtattc acatggatgt agccattggc agttatacaa gatcgtgttt cttttctttg 660  
 cccctgccc ccgtcaccta agaacttgnt agatattcca tttctttttt taaaaaaagg 720  
 atccagttag taaaggatgat agagagcata tggataaata gtgaagaagc ttgatgaggg 780

gagtgggtag ggtagaaac .cccangggaa ttactcaggg ttaaaccctg ncatttatat 840  
caagccatat t 851

<210> 288

<211> 858

<212> DNA

<213> Homo sapiens

<400> 288

agtagccggg tatggtggtg cacaactgtg gtctccacta ttgggaggct gaggtacatc 60  
acttgagcct agcaggtcaa ggctgcagta aggtatgac acaccactgc actctagctt 120  
gggtgacaga gcaagacccc atcttggcag gtgggggatg caagaaaaat gcaaggaaca 180  
gatagagata aatagaaaac atataagaag acaatcatat taaatgtaca tgggtctaaat 240  
acccccaatt aaaaagcaga ggttttaggc catatacatt taatgtgatt gtcttcttac 300  
atgtttttat cagagaaata aaactatcgc ctccaagaaa cacaagttaa atacaaagat 360  
gcaaacaggt taaaataaaa gaatggaata atatatacca tgcttacgct agtcaagaga 420  
aagctagagt agaaatacta atatcaggca aagcatattt cagagttaa cacaacattt 480  
ttccactatt tgcagtcaaa agtatcgta acactctctt tactctgctc aaagttacag 540  
agttcttttg tataaacatt agaacactta tcacagcctg cctataatgg agaataattc 600  
catgttgtat actatacaac actcttacta aagtcatta gacagaaata tgtagcattt 660  
gagacacctt ccaattataa aactctatgc aaacaaaaat taacaacgca gatctgagac 720  
tattatatta tcctgtgaag gaaggtctgc tgtctgcaca gtggtcctag gctggctttc 780  
tgaggacttt gaatttcaag agggtcccct aactggtaat catgggttac tggatctaga 840  
ctatggaaat aatgnggg 858

<210> 289

<211> 847

<212> DNA

<213> Homo sapiens

<400> 289

```

aaaaaaaaa aaaagaaata caccatccaa tcagaacaag tctgaaataa acatgtttta 60
aaagcctgta atgacagaga ggtggcaaaa atgaagagga tgctcaaatag aaaaggaaaa 120
agaagtttag gaagaactac ctgaagccaa gagacctctt actttgtcca ggtgggaaac 180
tgaggcccag agagggaaga aagctgggtca aaggtcacac acccattgga agctgagtga 240
gtgacactca ggaggtgagg attccatggg aagagcacct agaggtgatt ctcccacctg 300
cagctcctgc atgggctcta gaagctgggt taacacatga ctcttctgag cctttgcctc 360
atctgtgaaa tggacacaat gacaactact acggggtggt ggtgagcaga aggcaggtta 420
tcctctggcg tgtgagatac tcagcccagt agagtgttag ggactcataa aggcttgcta 480
ttagaaatta gggccccagt ctccatggac agggttttgt ttgtttttg tttttgacac 540
aaggccattg ctctccttta aaggtttggg ttgtttgtgg cagggatggg gaaaggatct 600
gcccttccca ggccctgccg tgcccagcac acctgccatg ctgaatctcc cctcaccctc 660
gcagggaccc tctgaggagg gtattccccc attttgcagg ggagggaatt cangctcaga 720
agtgaacact tcagaacttg cacctgccgt gcccgccgag ctgtgcctct tctgtgngca 780
tgcgttctcc atnccagggt ccttacctct gatcttgaat ctttacggat gccctcggct 840
tacttct 847

```

<210> 290

<211> 860

<212> DNA

<213> Homo sapiens

<400> 290

```

atcgagtcgg ccttgttggg actggttaac atgctataaa aatggcactg tcacttgaag 60
taaagtctt tgaacttaga actgcatat' aagaatttgg actctttgcc acagagtga 120
gaggaagccc aggagaacaa tgagtcagtt ttttttctt tttttctaca ttgcctacat 180
ttaatattct tttagagagt tttcaaagaa ttgcttatgc aacacctatc ccagtattta 240
tacagaggga gaaattgatc attttcagaa agtcctttat ttaggtatgt actacacctg 300

```

ggctgactct tatactgatt tctaagttaa ttgtatccta tgcacagatc tcaaaaggac 360  
 tgtgggtgaa gaaacaagat catcagccca agaccctat tcaaccctaa ctgggttcct 420  
 tttcctatit tccagtgcag cttatccttg tacctaaagt tgagtagccc cactaggaaa 480  
 gattggcaga aaggaatagt taagcacccc ttggagcttg ctgcctgcag gaggctactt 540  
 ctaggtactc agcttccctt ccactctcta gggatcctgt agaccacagt gtttgtgctc 600  
 aactgcagaa gcttcatgtg agaaaaaagt ttccctttct ccactgacat attcttccac 660  
 tttttcttta tataatttcc tgctgggtctc tttaatcccc aggcttcttt caaactcctg 720  
 nttctctata tagtagcttc ctgtacaaat gtatgtcaca tttatatggt ggaaacttgc 780  
 ctaaataaaa ttaggcagat gtgtgatgcc nggatatccc catatgactt naccctggcc 840  
 cttcccttgc ttnatttagg 860

<210> 291

<211> 850

<212> DNA

<213> Homo sapiens

<400> 291

agaagcgcag cttctcgggg aagctgtcat ggctgctcct gtacgtagtc acggtcttgt 60  
 gctctaaggt gagtggagga cgagcttggg cttagcggca gcccgatatca catcctagac 120  
 tttttacttc gaggagaaga gtctcacgag ttgtcctgga agaaaacgac agcacgtgtt 180  
 ctttttactt agtagaagtg acgttgggtt catgttgaca actttgaagc catttggaag 240  
 tgtttcagtg gagagcaaaa tgaataacaa agcgggctcc tttttctgga accttagaca 300  
 attcagtaca ttagtttcaa caagcagaac tatgaggcta tgttggttgg gactttgcaa 360  
 accaaaaata gttcattcaa actggaacat tttaaataac tttcataaca gaatgcaatc 420  
 aactgatatc attagatata tctttcagga tgcattcatt tttaaatacag atgttggtt 480  
 tcaaacaaag ggcataagca ctctaacagc ccttagaatt gaaagactac tttatgctaa 540  
 aagactgttt tttgactcaa agcagtctct tgtccctgtt gataaatctg atgatgaatt 600  
 gaagaaagta aaccttaatc atgaagtctc caatgaagat gttcttacca aggaaacaaa 660  
 accaaaccgt atcagcagta gaaaactgtc tgaggaatgt aattccctga gtgatgtgtt 720

agatgcattt tcaaaagcgc ccacatttcc tagtagcaac tatttcacag caatgtggac 780  
aattgccaaa agactgnctg atgaccagaa gcgctttgaa aaacgactga tggttacccc 840  
ctgcattaa 850

<210> 292

<211> 113

<212> DNA

<213> Homo sapiens

<400> 292

agacggccat ttgtggcggc gctggaggct gngttcgga ggcgntgcgg agacgcgtat 60  
aggagcgcgc ccccgcccg ctgccgcccc tggcccgtgc cgtcaccccg ctt 113

<210> 293

<211> 848

<212> DNA

<213> Homo sapiens

<400> 293

aaatataaac tagtaagtac tgtaaaggaa agaaacatgc ttctaataga aaaaatatat 60  
taaaaaggaa cagtaccgtc actgggaaat acaggaagac ttctctgagg aattgatctc 120  
tgagttggga ttaaagtga aaaagcactg gaagaacatt ccattttgag ggaatagcat 180  
gggaaggtcc ccatggaatg aagaaggatg atgtattaga aaaactgaag gaaggggata 240  
atgctgagcc aggaaagtaa ggagcctagg cagtgtgaaga tgattccaga gaggcaggca 300  
aggggtagac ctacaactat agtataaata actaacttaa atgactatag aacatgataa 360  
ttctgaaacg ttctgtaaat agtttttgta attaataatg gataatgcc tacattacaa 420  
ttatgtttta gactagaaaa gcatttcccc tcttgataaa gtttcaaact attcagtga 480  
gaaacttgaa tctccatatt gtaggggtta tttctctttt gtgattatag ttttcaaatt 540  
tcgtattgag tgttgcttac tgaattgagt ttagaatcat cagttatcat aagacttgtg 600

tcattaataa aaatgcagtt tgagtgcctt ttaacactag tccaaacatt tagacgtaag 660  
 atcaccataa aaaaattcaa taggaataat aaatcagcat cagaggatat gagggatatg 720  
 anggcctaag tgggaaatgt gtgtaccaac ttaaaacaaa gagcttgaaa atttaaaatt 780  
 acttaataa ttaatttcat ttatgtgatg ntagccacca tgatgataat ctgaatgaag 840  
 acctccct 848

<210> 294

<211> 781

<212> DNA

<213> Homo sapiens

<400> 294

gatttagagg tgtggaaaat cttttaacgg ggagatcctg aaacacggaa acatggcagg 60  
 gaagttagaa tttcctgatg gtcattttta acatttttaa gtttactttt tggttgttgc 120  
 catttttcta gaatccgtgt cttttttggg gaaatacagt ctttgagga ctagaattta 180  
 atgatttctt tacacatcta ggattttttg agatttagaa aggatatggc tttattccta 240  
 aggaagtgga ggcagcagtt tctaggatac tctggtttca aggcattgcta acttggttgt 300  
 gatgtctaac ccatttttgt ttacacagtc tgaccactag cacaatgcct ggcacatagt 360  
 ttacaaatca ttttaaggcaa gcttaccatc ttaagacaat ttaatacata gaagtgtccc 420  
 tcctaaaaat ctgagtttga tttagaaatc cagttatacc tgcaggtact gatgactaat 480  
 tccttctttg aagacaaaat aagcagctgt gtagcttcag tggctctcaa atggataata 540  
 gattcagtgt atactcgctt tgaactttcc tgttttttga tcagctagat aaatgacttt 600  
 agtgggtaaa tgtctgcctc caaaacaaa ttctgaccct gatctaagta ttctactgca 660  
 ccgctgtcac tggaatatca aagttggccc tcagactggg gcctgggtcc ttggattggc 720  
 ttgagtattg aggtctgnct catcttacta gggaactaaa atgatgttga ttggtttggn 780  
 n 781

<210> 295

<211> 721

<212> DNA

<213> Homo sapiens

<400> 295

```

aggtttccgc agctgagggg gcagctccgc ggcggcgtcc ggggtctcca gtagggctga   60
cgctccggtg ctcgcacaat cccccgcctc ggctggcaac gggcgctcct ccactccccg  120
agtccccggc agccgccgcc accccagcgc gccccgatct ggccccctgc cccgcgaaga  180
tggctgccgt acgccgggcc cgcagttatt gccgctgcct ggtgcgcttc tccgaccgag  240
aactctgcta agctccgctg cagagacagg caggagtaga caccggaca cccagcaccc  300
ctcctccggg gggcggtgca gagggggcac ggagagcccc tcgagcgcag caggccgccc  360
cgccagcatg gcagaagctg aggaagattg tcattctgat actgtcagag cagatgatga  420
tgaagaaaat gaaagtcctg ctgaaacaga tctgcaggca caactccaga tgttccgagc  480
tcagtggatg tttgaacttg ctccaggtgt aagctctagc aatttagaaa atcgaccttg  540
canagcagca agaggctctc tccagaaaac atcggcagat accaaaggaa aacaagaaca  600
ggcaaaagaa gaaaaggctc gagaactctt cctaaaagca gtanaagaag aacaaaatgg  660
agctctctat gaagccatca agttttatcg nanggctatg caacttgac ctgatataga  720
a                                                                    721

```

<210> 296

<211> 847

<212> DNA

<213> Homo sapiens

<400> 296

```

aggagaggcg gagaaggaac cgagcgggca gttgagggaa atctcggagg aggttacctg   60
cgatcaaact ggggctgcgt agtgttaggg tcaggcagct ttgaagtgga atccggatcc  120
gccactctcg ctgcgtgata ttgggcattg catcaaagcg ctctcaaccg aacgtctcgg  180
gtaaaatggg attagtgaag tctaccaagg tagttgtgag gatcaagaga gataacgcgg  240
aaaacgcctc acctggcacg ttatagatcc taaatgccta gctattatta tggagccccc  300

```

aacctccata ttttacaact gggaacacgg gactcaaaga gattaaaaaa ctaaatagact 360  
 cactcaaggt caggtagtgg tggagaccca ggcttcaagt tcaataactct ttgtcctaca 420  
 aagccttccc ttaagcaggg gtaataaaac atttcagaaa aaccacctta aagagcatcg 480  
 cttgtgatct gtggatcact tggtagtccc cacctccctc ccatccccgc aaagggttag 540  
 agctggacat aagggccttg gtgcaacttt tggagggcag ttgttcagct tctgaatttg 600  
 catctgaacg agcaataagg aattttcttg gaagttaaga atttccaata aatcttggac 660  
 tactctaaaa tgcaccagaa attacgtggt cacactcgtg cagtgaaga agctttggca 720  
 gtagcataag acattaagca gaagtaggaa atgcagtgag gaagaattgg aatgttttca 780  
 acagctgcca ctatggatct aggatgagag ctttncacat gntggtaaga atgagagacn 840  
 gattact 847

<210> 297

<211> 757

<212> DNA

<213> Homo sapiens

<400> 297

gtaaaggaat gtcttttttaa ttcagctttt cttttctcca tgctagtgtt atcaggtttt 60  
 ggtatttatt tacttacagc atatgttatg aagctggttt gaaaattggg tttagatata 120  
 tctgcaagtt tactactttg actgtaaaaa aaaaaaatga aaaagtagtt gacatctgtc 180  
 ctcagaagaa gtttgcaggt tgcataattg tgtgtaaata cacaggctaa aaggtaattt 240  
 atgttccttg ggaattgaaa tggtcagtgg cccgttacag aaacttatca gtcatatatc 300  
 agcaccagtt cattcttttg caccttaggg accatctgtc ccctgaggtg acctgagaaa 360  
 caaccagttg cccacagact gttatttctt caagttagcc aggatttgat ttcactgcct 420  
 tatattctat ttttagtgta cagtgccttg attttttgga aaaactaaat tttaaacata 480  
 tttgaaaaat gttataagac ttggacatta agtctgttga tagccaaagt cagtttacca 540  
 aagtaaaaca nataaattct atgcttcttc attgncaaag agcagctctgc catcatgttg 600  
 atataaatgg actatgtaaa gtgacatggg gcttactctc tacctaataa tagcctccct 660  
 cctgttccaa caagataacc aacaggtata ttttaatttac cagntaatat gttttggata 720



attgctgcct tgaaatgcta tatgnttata ggnccat

757

<210> 298

<211> 742

<212> DNA

<213> Homo sapiens

<400> 298

gaaggagacg ctattctcag tgatgcccg gtaaggccca ggctggagcc cggggcaggg	60
gttgaccttt caggctacag tggctgatga tggaccagc aggtggcctg aggccatgga	120
cctgagaatg gagcagctac actcacagga ggggcaaaga gacaagagcc ctgccatata	180
cccctgcagc tccggagggc actgaggagt tgtcccaggg acctaacca ggctcactatc	240
ccatgcagga gacagtgtgg tttggagcta gctctgccgc taatccttgt gaccctgggc	300
aggcagctaa gtccctctga gcctcagttt cticaccaat aaccagtact aatcctcctg	360
gccagagtc agaaggctgg ggggagaacc caatgagaga gtgtagttag gagcactttg	420
ccgtcagatg atacagtgcc cccaagcac cccacaggac agcgtgcct acatagtac	480
gtgatgttct gatgacaata gtgagaagct ggagagcact gttgacagca tgttaccagc	540
attctcttta gcgtatcctt ggagctttgc taaggagaca caagtcagtg gcctcaaata	600
ctgagcagct ggtgaataat ggaggcagaa ggccacctct ttgggtgag ggagctcact	660
gcttcacagt ggcctttcag ggacagtctt cagctttgca gatcacgang ggcgtncagg	720
aagggtgan gccctcgtcc tt	742

<210> 299

<211> 386

<212> DNA

<213> Homo sapiens

<400> 299

gagccgagcg gcttctgctc aatggcggaa aagccgccgg tgctctgacg gcctcgttcc	60
---	----

cctagcagtt gcgggggagt ttcctgccgg cgcggtgga gtctctgatt ctcagggttc 120  
 ggtggttgga agatgctcca gagagacgag gctgcggcgg aggaggtggc ggcggccgaa 180  
 tcggcaacgg cgctaggggtg gagagaaggc ggagcgggcg gcggcgggcg cgtgaggggc 240  
 cgggcgggtgt aaacagcccc ggaggcgggcg gaggcggcgg tcgagacccc gagggggaag 300  
 cggcggtga gtcagggtcg ngcctccggt ggaaacttgg gctgagtacc gcgnggtcg 360  
 cgagcgaggc gccctagaca tnttgt 386

<210> 300

<211> 880

<212> DNA

<213> Homo sapiens

<400> 300

aatgaatttt tggtcaggga ttttagtgc aatatagaag agtttagttt gagttttaga 60  
 tccaagtat tcctttcttc ccaacctata ttatacttgg tcaaataaag tcagggtaat 120  
 caggcagcct gaaaggaagc agggcatcta cctgcctctc tggtcagatg gagtaattag 180  
 gaacaaaaaa ggccactctg ttgttagcca cacctattta tcaagaacaa aggagcatag 240  
 cattttaaat tcatttgagc tgaaaccctg gctggctcag actcttactt gtcttatcac 300  
 gcaagatcag ctttgtatat cattttaaag aggtcgtgtg gcgtgttttc ctgacttctg 360  
 tcctctcaag ttaaataatgt catcagaaaa tatatatcat ccagaaaatg gtggctctct 420  
 ctctctgtga gacactcttt ttagaaattt gtcttctagg tatttctatt ttaaaatgtt 480  
 cagtttctct gcaataactt tcaaatttca ttatttttac caagctagat ttgttatatc 540  
 tgtatacata tttatgtaat aatcacttca tatttgcaca tagtttttga acccagaaaa 600  
 gtaaaagaga aaactagtga cttgtctctg gtggcaaatt ttctctgtga ctaaattaaa 660  
 accatgaacc tgtccagtac agaataatgc cactggtgaa gtcaggctta aattcacttt 720  
 aattctagag aaactgtgaa tttagaagga ccaaaagtca aaatgcaaaa gataatgcag 780  
 acccattagc actggnetca tattcagntc aaatatttac tctagtaccg ataggatctc 840  
 tgaatatcct tctcttgac atcacaatac ttttcatgt 880

<210> 301

<211> 806

<212> DNA

<213> Homo sapiens

<400> 301

```

aaatagatgt ttatcatttt ttatatagac tcattgaaaa aatgactttg tgttcttcca 60
gtacatacca tcatgtctga gagggcagag atctagacaa gtgtgggaaa gatgactttg 120
gatcaaaatt ttcttgtgaa tataatgtgc ttatgcgtaa tttaaagctg actgtattaa 180
agatacattt tttgtcaacc agatgattgt taaataacctg tgaagtatgt gtggcccggg 240
cctatttcct cacctgttta cagtgaatca gacgtcccaa tagatgtgga gacggtcaca 300
tcaacgccta tgccactcta tgacaatcag aaggcacgca gcgtgatgaa tgagtgtgaa 360
cggcatgtca tctttgccag gactgatgca gatgcccctc ctccaccaga ggactgggag 420
gagcatgtca acaggactgg ctggacaatg gccagaaca agctattcaa caagatcctc 480
aaagccctgc agtctgaccg gcttgcccgc ttggccaacg aaggggcttg taatgagcca 540
gtgctgcgcc gtgttgctgt ggacaagtgt gcaaggagag tgcggcaggc tctggcaagt 600
gtgagctggg ataccaagct gatccagtgg ctgcacacca cccttgtgga gaccttgagt 660
ctgccatgct gcagcctacc tggatgcttt gcagacgctg aaggggaaga tcccaacctt 720
gattgaccgg atgcttgggc atcaacacaa agactgggct gcggaactga ngnccttgctc 780
ttctactgaa naggcctggg accctg 806

```

<210> 302

<211> 882

<212> DNA

<213> Homo sapiens

<400> 302

```

gatagataat agtgtaaaat ggacttgcct tgcttctact gatgtttttc acatgtttcc 60
cgtaactgat acttttcac agttgtggaa ttcccataat tgcagggatt ccttttctgt 120

```

ccttaggata ccctgaaggc cttttaatct tgttcaccaa atgtgtgttc cttgctgaca 180  
 caaaatggc tctaccatca gtgggtgtac tcttttttcc ccctttgttc aattcaatct 240  
 caggaacgta tttcctacat taataaatat ttactgagca cctaccaa at gccaaagcact 300  
 ttcctagaac aaaagtcttt ttgaaacaaa aaagtatctt ggcagttaag gcaaaatgac 360  
 ctaaagaagt tttaaaatga aagggtctcct atatttcagg gtctttgaga tgaaaccctg 420  
 caagtagact tacgtgaatg atttttgctg tggtaagtat acaa atgcag tgggagttgc 480  
 cagactttaa aagacgtgaa taacaatcat ataaaatgcc agacattgtt gtggaaaaga 540  
 gaaagaagat accctactag ggggttttta cctcctttaa gaaacagact aaaactagtt 600  
 ttctcaagt cctgaatata tatgggtttaa ataacaat at acaacacttt caaaataaaa 660  
 tctaggaatg tttacatatg cttttaatct caaagtctaa tgtcttgaga aaagtaaatc 720  
 tgtgagatca ctgactcaca gaatttttagc aaatagaaaa aatccagt at cttcagaaca 780  
 caagggtcga tcttttgtcc cctaccgcga agacattgct tggtagcaaaa atagaaaggg 840  
 tattttttta agggggaatt atgggttttt ctgaaaacan aa 882

<210> 303

<211> 637

<212> DNA

<213> Homo sapiens

<400> 303

gtatcaacaa atgcaagtac accacaatca gtgagcagtg tggttcatta tctggcaatg 60  
 gcactctttc aaatagagca gggcattgag cggcgttttc tgaaagctcc acttgatgcc 120  
 agtgacagtg ggcgttctta taaaacagtt ctggaccgtt ggagagagtc tctcctttct 180  
 tctgctagtc tateccaagt tttctttcac ctatccacct tggatcgtag cgtgatatgg 240  
 tctaaatcta tactgaatgc gcgttgcaag atatgtcgaa agaaaggcga tgctgaaaac 300  
 atggttcttt gtgatggctg tgataggggt catcatacct actgtgttcg accaaagctc 360  
 aagactgtgc ctgaaggaga ctggttttgt ccagaatgtc gaccaaagca acgttctaga 420  
 agactctcct ctagacagag accatccttg gaaagtgatg aagatgtgga agacagtatg 480  
 ggaggtgagg atgatgaagt tgatggcgat gaagaagaag gtcaaagtga ggaggaagag 540

tatgaggtag aacaagatga agatgactct caagaagagg aagaagtcag cctacccaaa 600  
ccgaggaaga ccacangtta nattgccagt taaaacn 637

<210> 304

<211> 843

<212> DNA

<213> Homo sapiens

<400> 304

accaagttgc ttaacttcgt tgagcctctt taggggatga tccatgccct aagctgcctg 60  
actgccccaa agcagaacaa tgatgagcaa tcatttagac gagataagca cctggagctc 120  
caggcattgc ctaataaccc tgaattattc aatccttcat ttcacagaca ttgattgact 180  
gggatttaaa acaatttaaa aatgaatgtg acactggccc tgccctcaaa gagcttaaga 240  
gccatctagg tacacaggac atgcccattg acagctgcaa aataaggcag ggtgtgtata 300  
atgtatgctg ggggtggaag aaccagggaa agttgtcttg gcagaggtgg catggcagaa 360  
ataagcaggg aggctactcc aactggagga gatggctgga gcagggtttg ctcttgagtg 420  
acgagtagat gaggttggct ggagcagatc tttggaagga cctgggaagg gtttgggggc 480  
gggggtggac tacagagttg gagctaggtg gtaaggggcc tttaatgtca ggctaagtag 540  
ccaagattta atttagcaag tagcgggaag tcatgaagat gtttgagtca gagattcagg 600  
tcagtaacct gaccaggact gggctttagg aagaaagtcc tctagcatca taaggacag 660  
attggtgggg gaggggtgat ttgaggtagg aagaccagtt gggagtgatg taattaagtg 720  
aacaagatct aggactagga ttcccaaact ttgagcataa gattcccctg aagtgcccaa 780  
ctttggagat caaattgana ngtcttgcatt tttgccccct aaggaaatgg cttttttttt 840  
ttn 843

<210> 305

<211> 814

<212> DNA

<213> Homo sapiens

<400> 305

```

ttttgttggt gttacttggt tgtttgaaat aatattagcc taaatttgac attcacactg 60
agtatcagta agggatcatgg tttttaaaccc ttgtgctttc ttatTTTTTTT caaactaatt 120
tcagacttaa atagaagtta caagaatagt acaggaggtt tcatgtaccc ttcacccaaa 180
ttcctcaagt gttaacattt taccacattt ataggTTTTT ttctgataca cttgagagta 240
agtttcaggt agatgtccct ttacttctaa atatttcagt gtgtattttc taaaaaacag 300
ggatattccc ttatagaatc atagttttat tatcaaaatc aggaaattta ataattatat 360
gtctcatcta actatagatc ttattagtat ttcactattc ttctaatttc tttagagcaa 420
aatggaaaaa aatggTTTTT ctgttctggt gcaggatcca gcggaggctc acgtgctgta 480
ttggattatc acatccttaa tgttctttta tctgaaatcg ttcccaagtc ttgttattca 540
tgaccctgac tgacattttt ttaagagtaa aaacactagg ggggattttt tgttgTTTTT 600
tgtttcattt tgtTTTTTgt ttcgttttgt tttttgtctt ttgntTTTTT ttgagccagg 660
gtctcactct gtcacccagg ctggagtgca atgggtgcgat ctcagttcac tggaacctnc 720
aactnccagg ctcaagtgat cctccacact cagccttccc aaggagctgg gactaccagg 780
cttacagncc aacatgcccc agcttaattt ttgg 814

```

<210> 306

<211> 834

<212> DNA

<213> Homo sapiens

<400> 306

```

tattagcaga ctggaatgaa gatatagaag catttgaaat gatggagaag gatgagctat 60
gacttgctaa acaatctggt ggtaggtatt taaaaagaaa aggtaaactg tgtgtggtta 120
atagacatcc taatactaag caggctttct aatgggaggc ttttaagtatg gtgatgaaca 180
accacgttct gactggcgta gttatcgtag gaatctggag catgctgtgt tagaattgac 240
cttgtttaaa actgtcccat caaaaatgga aatccacagt tcccccttca aatgcagcac 300
tgcaccaccc tgcaacacct caggccaggg aaagattact gagcattcct gcgaaccaga 360

```

tttctgttgt ctctggatag acaagaaaca aaattcattt agtagtggag tggggaatag 420  
 gagtttggat agccttctaa tttaaaggaag ctgcctttc ttggtttttg gggtagagg 480  
 ctcttttggg aagatgcac cgagtattgt ggcatctga ttatgctgcc ttcacaaaac 540  
 actctaagt acctaagtgg ttatgaagca aatgcattta tggtgaaaac agtctttgct 600  
 cattgctttc tcttgtttca tttagtgaac aatgatcaag atgacttgat ttttttccct 660  
 tcttaacaat ggctttttta tttaaaccaa aggtgaagcc agtgtacttt ctacagtgagt 720  
 tctctgcata aagactaatc agtgggacca ggtaaaaaan ggcatataat acattggggg 780  
 anattgctta ctttaatact tcttgaaaaa tggganttaa gggaagaaac ctgg 834

<210> 307

<211> 769

<212> DNA

<213> Homo sapiens

<400> 307

gttcataaca actccaagca tggacggaga gcaagaagac tcgatccatc ggaagctacc 60  
 ccctgcatca aagccattag cccgagtga ggctggacca caggaggagc catggctcatc 120  
 atcatcgggg acaacttctt tgatggcttc caagtgggtt ttgggactat gcttgtatgg 180  
 agcgagctaa taaccctca tgccatcaga gtacagactc ctccccggca catcccaggc 240  
 gtggtagagg tgacattatc ttataaatct aaacagttct gcaaaggagc cccaggaagg 300  
 ttcatttaca cagcattaaa tgaaccacc atagactatg gcttcagag actgcagaag 360  
 gtcaccccta ggcatcctgg agatcctgag agattagcta aggagatgct gttgaaaaga 420  
 gctgcagatc tagtgaagc tctttatggc acaccacaca ataaccagga catcattttg 480  
 aagcgagccg cagacattgc tgaagctctc tacagcgtcc ccaggaatcc cagccagctt 540  
 ccagccctct ctagctcccc agcgcacagt ggcatgatgg gaatcaactc ctatggcagc 600  
 cagcttgggg tcagcatctc agagtcaaca caaggaaata atcaagggtta catccgcaac 660  
 acaagcagca tctctnecg gggatactct ttcagcttca cgccttnaac agtctaanta 720  
 cagtaccctt cagcaaccag tatgaatggg tacagcaatg gtcccatgg 769

<210> 308

<211> 567

<212> DNA

<213> Homo sapiens

<400> 308

```

aaaaactccc tgctagagag actaggagat ttggggctgc ggccgtttcc tccggagcac   60
ccacgggact gtgtgctggg gtccctccac cggctgtgtc ctttattctt ctttctcacc  120
caacgattta cctgaacggt tataaagtgc acgttatttc cctaagcact ttgagtatat  180
tggcccaactg cattctggac ttcaaaattt ctgatgcgaa atatgctgat acttttgttg  240
aagaaatctg ggctttgagc atctgtaaga tatttgttgg aaggttttgt ctggtccttc  300
ttactgatgt gttgctcttc ttcattggctc gtgaaaacta ttagagtcac ccaaggntgg  360
gaagagagat cagcaacggt aactgggtgt caagaaaaca taccgagatt gaagccatcc  420
acttctgcag gaacaccgaa aagaaagctt acaatctgaa ggtgtccgtt cttacactgg  480
tcagaccact gtccttgggg cagctggggn ctttgggacc ctccaccggn ctgcccggtc  540
cgncggactt ttggctgaga tccgtgt                                     567

```

<210> 309

<211> 748

<212> DNA

<213> Homo sapiens

<400> 309

```

gtcgccgcgc ggccgccggt gagccgcatt gagccccggg cggcggacgg ctgcttcctg   60
ggcgacgtgg gtttctgggt ggagcggacc cctgtgcacg aggcagccca gcggggtgag  120
agcctgcagc tgcaacagct gatcgagagc ggcgccctgcg tgaaccaggt caccgtggac  180
tccatcacgc cctgcacgc agccagtctg cagggccagg cgcggtgtgt gcagctgctg  240
ctggcggctg gggcccagggt ggatgctcgc aacatcgacg gcagcacccc gctctgcgat  300
gcctgcgcct cgggcagcat cgagtgtgtg aagctcttgc tgcctacgg ggccaaggtc  360

```



aaccctcccc tgtacacagc gtcceccctg cacgaggcca gctttcccg cctcctgagc 420  
 accctggctt cgacgccctg gatcaactga gccagggtga actcctgggg gacatggatc 480  
 gcaatgaatt cgaccagtat ttgaacactc ctggccaccc agactccgcc acaggggcca 540  
 tggccctcag tgggcatgtt ccggtctccc aggtgacacc aacgggtccc acagagacca 600  
 gcctcatctc cgctcctggct gatgccacgg ccacgtacta caacagctac agtgtgtcat 660  
 agagctggag gcgccccgtc cggtaagcc cttggcgccc tttccttct ttgtgccctt 720  
 gaantggcaa naaggaaccc gtnccagg 748

<210> 310

<211> 800

<212> DNA

<213> Homo sapiens

<400> 310

atcttctctt ctctgcaaac ctctcctgtg ctgatgcctg ggcaccagag atgagggtggg 60  
 agcagtacct gccctaggcg gggtcacgg tctagtgcc acagcagctg tccaggaggat 120  
 gcaggctgaa gcagtgagat ggcagggggg acggagttag aaaagagcct ctcagaaggg 180  
 caggaggggc ggggaggggc ggggtggcac atggagctgc caggaacccc agaggcagct 240  
 ctgttcccag agttcagaaa cctccaagaa aagctggtgg cattgtccgt tttgttgttt 300  
 gcctatctgg cctttggcta ttgactggat ggcattcttg gaatcctctg aagggtctga 360  
 gtttacccea agcacaggga cagagggagc aggtggagtc acttctcgtt gatgtccagc 420  
 tgagctgggc tgggtggctgc ctcagaaggg agggggcagc tactaggagc agcagcctca 480  
 ccccagggt ctgtggacct ccttagcctg tgatggcctt ggcaatgggg atggcctggt 540  
 tgggggactg agcaaaaggc aggcagtagg gatgggtgtt cccagccttg agtcagatcc 600  
 tgagaagctc cagggcggng cacgttctgt ctctgccatc tggaaacctt ccagctacag 660  
 caattggcac cttcaacaag aaccctgag cccggaagct tggtagagg aaccttcagg 720  
 tcaactnttc accacacaga ccaagtctgc tgatctgngc cattccctga tgcactgggg 780  
 catnccgtga cccagactgt 800

<210> 311

<211> 577

<212> DNA

<213> Homo sapiens

<400> 311

```

ggaatgcatg tacattctct gatattattc cttatatacct cgggggatgt gacttctaata 60
gtcacacagc gtgttctccc tgtgttctct ttcataatat cctagtgcaa ttgtactctt 120
aatgacgcag ggggtgtagg cattgtgata ttattcatgt tattctagaa ggatgctact 180
cctaattgtca caggggtgta caccctgtga tagtattcat aatttcccag ggggtctatac 240
tcctaattgtc acagaagata acaccctgtg acattattcg taatattctg atgagatgat 300
tctcctaata tcacaggggg tgtacaccct gtgataatat tcttactcct ccagggggat 360
gtcactctta atgtcacagg tgtgttctct ctgtgatatt attgaaaata tgctagctgg 420
gtactactac taatgtcaca atgcgtgtac accttgtgat attattagta atattgtggg 480
gggatgttac ccctaattgt acaggggtgt acaccngtg atattgctcc caatattgna 540
nggggatgct actcctaattg tcacaggtgg tgtacag 577
    
```

<210> 312

<211> 766

<212> DNA

<213> Homo sapiens

<400> 312

```

gtgttccggc cgatcccacc tcttctcgac cctggacgtc taccttccgg aggcccacat 60
cttgcccact ccgcgcgcgg ggctagcgcg ggtttcagcg acgggagccc tcaagggaca 120
tggaactac agcgggcgccc gcgggcggcg cccgaaatgg agctggcccg gaatggggag 180
ggttcgaaga aaacatccag ggcggaggct cagctgtgat tgacatggag aacatggatg 240
atacctcagg ctctagcttc gaggatatgg gtgagctgca tcagcgcctg cgcgaggaag 300
aagtagacgc tgatgcagct gatgcagctg ctgctgaaga ggaggatgga gagttcctgg 360
    
```

gcatgaaggg ctttaaggga cagctgagcc ggcaggtggc agatcagatg tggcaggctg 420  
 ggaaaagaca agcctncagg gccttcagct tgtacgcca catcgacatc ctcagaccct 480  
 actttgatgt ggagcctgct caggtgcgaa gcaggctcct ggagtcctatg atccctatca 540  
 aggtgggtcaa ctccccccag aaaattgcag gtgaactcta tggacctctc atgctggctt 600  
 tcactctggt tgctatccta ctccatggga tgaagacgtc tgacactatt atccgggagg 660  
 gcaccctgat gggcacagnc attggcacct gcttcggcta ctggctggga gtctcatctt 720  
 catttatcnc ttgctactgt gcaacgcccc gatcaccatg cttgna 766

<210> 313

<211> 799

<212> DNA

<213> Homo sapiens

<400> 313

atcataaaaa cagcctttc tcattcaact gaaaaacaca ctaaaatttt aaaagagaaa 60  
 aatgcaacat cttggaaagt aacgttttaa caccataaaa atttgcactt attcaactga 120  
 aaatttacac taaaatagac attaactgtg cttttacatt ccaaaccatc atactaaaca 180  
 taacaagtta attgccaatg ttttcttcc cctatacttt gaggtagttc tacgtaacca 240  
 actataacaa atttacttcc taacatcctc aatcttctgc tctcctttag ttttaagata 300  
 ctttatgaca tgggtaatac tctgaaatgg atgccttctt tggatatatt ttggggtttt 360  
 agtgtctgga ggactttgat ttctatatta gcatattggt ttatgaagtc tggacataac 420  
 ctaaggaaaa taatcacttg ttttaaagga cagttctttc aaattcccta caatgtcaga 480  
 tttagagcca aataccatcg aatatgttga tgctgtaatt cctagcaa at tcaagaggt 540  
 cactctcttt tcaaaattat accgtgcccc ttctttgaaa atgagtttca ttttcgaagt 600  
 caaaacaagt cctttctctt ccactggcgg gcccttctgg tccccagatt agcctgttcc 660  
 aaaattggtc atgtgtctca ctgggcccct tcagttgacc cagcgtcctc accagctcct 720  
 atccatctct atctgctgga aaggctttga ggtttcagat ttangacagc accactcatt 780  
 catggnetct nctgcatca 799

<210> 314

<211> 828

<212> DNA

<213> Homo sapiens

<400> 314

```
cccttgaagt tttgtgccag ccttcttacc taattaaaca acatttcagc agcgtggttg 60
ctaagccag gtaaccacca tgtgttatgt tagcctgctt ggatcaattg taattattac 120
tggaattgaa ttaattaata tgattttgaa cagttcatgt tcaaactaac atcctgtaaa 180
gtagacactg caaggagtta ctgatgaaag aaaagttgtt cataaaagaa gcctcctttt 240
ataattgact tgccttagac ttatttaata atgtttcata gtatttttta aaaagtatct 300
gaaccttgta catatttaca attatgagac atcctatcta aaaatttata ttttcgattt 360
aacatttggt gctggcagtg ataattttta ctctctggta ctatgaatca tctcattaaa 420
atcctctcaa ctgaatgaca ttatcccaat ttgcaaatga aagagagaca gagaacctaa 480
tgatttgccc ctggtctata cctggtactt ggaggttagga ttcaaagcca ggcagttctg 540
actccagagg ctgtgctctt aaccactcta tacattacct ctcaaaatag aagattaatt 600
ggactcaagt gaaattgctt gtataatfff taatcaaaac tatatgctgg ccacattaac 660
ttctgtgctg tcatcatgat catagaataa taacaacact caatttattt ctctatacta 720
ataactttga taaaatgnta ttatttatta aatctatttt tcagaaacca aaaaacagta 780
aacatgagtc aagatgaatt aaaaggataa gccaatffff aaggncna 828
```

<210> 315

<211> 807

<212> DNA

<213> Homo sapiens

<400> 315

```
gtgggccaca aggctacagc tgccactgtc gcctgggttt ccggccagcg gaggatgac 60
cgcaccgctg tgtggacaca gatgagtgcc agattgccgg tgtgtgccag cagatgtgtg 120
```

tcaactacgt tgggtggcttc gagtgttatt gtagcgaggg acatgagctg gaggctgatg 180  
 gcatcagctg cagccctgca ggggccatgg gtgccaggc ttcccaggac ctcggagatg 240  
 agttgctgga tgacggggag gatgaggaag atgaagacga ggcctggaag gccttcaacg 300  
 gtggctggac ggagatgcct gggatcctgt ggatggagcc tacgcagccg cctgactttg 360  
 ccctggccta tagaccgagc ttcccagagg acagagagcc acagataccc taccgggagc 420  
 ccacctggcc acccccgtc agtgcccca gggtccccta ccactcctca gtgctctccg 480  
 tcacccggcc tgtggtggc tctgccacgc atcccacact gccttctgcc caccagcctc 540  
 ctgtgatccc tgccacacac ccagctttgt cccgtgacca ccagatcccc gtgatcgtag 600  
 ccaactatcc agatctgcct tctgcctacc aaccgggtat tctctctgct ctcatcagc 660  
 acagccttct gccaccacc ccctatgac tcaaccaa atccggagct ttttccttgc 720  
 caccantccc catgtttcag acaccnggt cgctggcacc canaccacca ctcatattgc 780  
 ttggaattcc accttaacca tgcccct 807

<210> 316

<211> 846

<212> DNA

<213> Homo sapiens

<400> 316

agcgcagcta tggctgctgg cgtaccctgt gcgttagtca ccagctgctc ctccgtcttc 60  
 tcaggagacc agctgggtcca acatatacctt ggaacagaag atcttattgt ggaagtgact 120  
 tccaatgatg ctgtgagatt ttatccctgg accattgata ataaatacta ttcagcagac 180  
 atcaatctat gtgtggtgcc aaacaaatctt cttgttactg cagagattgc agaattctgc 240  
 caagcatttg tggtttactt tgacagcaca caaaaatcgg gccttgatag tgtctcctca 300  
 tggcttcac tggcaaaagc atggttacct gaggtgatga tcttggtctg cgatagagtg 360  
 tctgaagatg gtataaaccg acaaaaagct caagaatggt gcctcaaaca tggctttgaa 420  
 ttggtagaac ttagtccaga ggagttgcct gaggaggatg atgacttccc agaattctaca 480  
 ggagtaaagc gaattgtcca agccctgaat gccaatgtgt ggtccaatgt agtgatgaag 540  
 aatgatagga accaaggctt tagccttctc aactcattga ctggaacaaa ccatagcatt 600

gggtcagcag atccctgtca cccagagcaa ccccatTTgc cagcagcaga tagtactgaa 660  
 tccctctctg atcatcgggg tggTgcatct aacacaacag atgcccaggt tgatagcatt 720  
 gtggatccca tgTtagatct ggatattcaa gaattaccag ncttaccact ggaggaagag 780  
 atgtggagaa ttttgaaaga ctcttttcaa agttaaagga atgaaagaca agcttgnacc 840  
 tttctn 846

<210> 317

<211> 785

<212> DNA

<213> Homo sapiens

<400> 317

ttactaaaat ctaaattgag tactttttac tgTtgcagag aattaagtca ctaaacgtta 60  
 tttagataca tagatgctag ttgcaagtaa caccctTTtg taacataaaa gtaaaagcat 120  
 aataatttcc caactTTTT cttcaaatta aaaaagaaaa tagcatataa ttaccattct 180  
 tcatttgaga aagctgaaga ttctgatgct taaaaacttc agaattctaa tattaanaat 240  
 agagtggTtc atgtgacatt gaaggcttat ctctgtaaaa tagtgacact ggtgagtggT 300  
 attatctcaa tattttTgtc caaattcacc ttaggaaatc actgtaaatc ttcatTgttt 360  
 cctaaaagtc attattacgg cataaactta acatactTTg atagtagtta gtactgatac 420  
 gtgacatatt ctaccccgTg tctctattac tctgtctcta ttactgtgaa aagtcacagt 480  
 aaatttaaca ttttcttcca gactgtgtat gatctttcat tgtaatagag acatggagta 540  
 ggataagtca tgtattaaca tgtaagattt ttttaacctg ctccctcagt tttatagatg 600  
 agacaaagat aaggttgtaa gagctaact cttcaagtag gcagtactag taagttgtca 660  
 tgcgtggact gaactcctgg cacttctctc tcttaacttc aatccataga gaagccccct 720  
 tncTgccttc cagtattatt tagcagagga gaaaatenta ttangctgtt ggaactggTt 780  
 gccta 785

<210> 318

<211> 682

<212> DNA

<213> Homo sapiens

<400> 318

```

aagtctagtt aaacttttaa caaaggattt atgaacatct ctacttcctt cagttagttt   60
tttttttttt aacaagtaat attttcaagg aaaggaaaat ggacattatg atggctgtct  120
tttgtccttt tgtaaatggt ggttcttcta gagctgtgct atctaataatg atagccacta  180
gtcacatgta gctatttttaa tttaaattaaa aatttagttc ttcagtcaaa ataaccccat  240
ttcaaggttc agtagctaca aatggctagt ggctagcata ttggaccaca cagatacaga  300
ctgttttcat cattgcaaaa agttgtatta aactctattg tatagaatat ttgtctgaaa  360
tatagtatat gtggctgggc atggtgtctc acacctataa tcctagcact ttgggaggcc  420
gaggcgggca gatcacctga ggtcaggagt tcaagaccag cctggccaac atggggaaac  480
cgcaactcta ctaaaaagac aaaaatttgc ctggtgtggt gacgggcacc tgtaatccca  540
gctacttggg aggctgaggc aggagaattg ctggaaccca ggaggcgga ggttgcagtg  600
agctgagatc ataccacttt actccagcct gggtgaaaga gcgaaactcc atcccatctc  660
aaaaaaaaaa aaaannagaa nt                                           682

```

<210> 319

<211> 847

<212> DNA

<213> Homo sapiens

<400> 319

```

accgtggtgc cgagtgcctg ctgccttggg ccgccttgaa cctccagggt ttccagctcc   60
tcttccttca cccagtgcc actgccatga tggatgtgag tgaacttggg gagtctgccc  120
gctacctccg ccagggttac caggagatga cgaagggtgca cactatccca tgggacggga  180
agaagcgagt ctgggtgcct gatgaacagg acgcctacgt ggaggccgag gtcaagtcgg  240
aggctaccgg gggcagagtc accgtggaga ccaaagacca gaagggtgctg atggtgcgtg  300
aagccgagct gcagcccatg aaccgcctc gcttcgactt actggaggac atggccatga  360

```

tgacgcacct gaacgaggcc tctgtgctgc acaacctgcg ccagcgctat gcccgtctgga 420  
 tgatctatac ctactcagge ctcttctgtg tcaccatcaa ccctacaaa tggctcccag 480  
 tctatacggc ctccgtagt gctgcttaca agggaaagcg ccgctcagat tccccgcccc 540  
 atatatatgc ggtggcggac aacgcctaca acgacatgct gcgcaaccga gacaaccagt 600  
 ccatgctgat cacgtgagtg tggggctctg ggggtggggt ggaaaatgct ggccatctgg 660  
 cagaaagang gcggtaccac agtcatttcc caggattgaa tncaaagtgc ttaagccagg 720  
 acttttacca cctggagcta gtgtccagct gaactaaaat tggncctgaca ctttcctggc 780  
 cccaattctg aacagatgtg ttcttgatgg gggaatangg aggggacacc cncaaacgga 840  
 atggccc 847

<210> 320

<211> 851

<212> DNA

<213> Homo sapiens

<400> 320

gattaatgta gacaaacgtc caggtagcaa ttttggggat aataaatgag ttcacccttt 60  
 ttttttcttt ttttccctga gacagagttt gctcttgttg cccaggctgg agtttaatgg 120  
 cacgatcttg gcttaccaca acctctgcct cctgggttca agcaattctc ctgcctcagg 180  
 ctccaagta gctgggatta caggcatgtg ccatcacacc cggctaattt ttgtattttt 240  
 agtagagaca gggatatctc atgttggta ggctggcttc gaactcctga cctcagggtga 300  
 tccgcccact tcagcctccc aaagtgcctg gattacaggc gtgagccgtc atgcctggcc 360  
 gagttcagct tttattcaca tttttccccc gaagtgattt attcttcaaa gtagacagtt 420  
 atgttctata gagtgttttg ttttttcttt aagaaaataa ttacataaa cagagattat 480  
 ggtaaacatt ttaaattctta ggctgttggt taaatttaat ggtttaagca ctgttggggt 540  
 ctctttaatt aatatttgca gaaggagaac atatgtgttt cactgatatg tatggctccag 600  
 aaaaattact taattctcaa aaatatgttg cattctcata ttgtgttagg gaaaattcca 660  
 taagtagtct attttttttt ttcttttgct gactggtaac atccaaacac ctgaatgaaa 720  
 actgactcat ttctggattg gtgtttaaaa atattgattt gcagatgttc acagaacact 780



tgcatTTTTT ggattcacat tgctnaatca aatgtaaang gcaaatatgn atatttaata 840  
aaatgagaag t 851

<210> 321

<211> 722

<212> DNA

<213> Homo sapiens

<400> 321

aaaattacag gagaaaattg agaaaaattt agagtccaag gctggcacca aagacctgag 60  
acctaggaac atgagagtct gttttcttca tgtacaaaat aaagctacta acacctgttc 120  
taacaagact gacatgatgg aaatggcaaa atattaacaa ttatgccagg cgtaactgtt 180  
gaattgttgc tttctaacaa ttacttcagt gccaataaa tatcttcacc agaaaactat 240  
ttattcaagg ctggctgtgg tggctcaagc atataatccc agcactctgg gaggccaagg 300  
tgggcagatc acttgggctc aggagttcaa gaccagcctg ggcaacatgg agaaacaaaa 360  
tacaaaaata caaaaaatta tctgggcatg gtggtatata cgcctgtaat tccagctact 420  
cgggaggctg aggcacaaga atcacatgaa ctttggaggc aaaggtagca gcaagctgag 480  
atcatgccac tgcactccag cctgcgtgac aaagtgagac cttgtctcaa aaaaacacaa 540  
caaaaacccc aaaaattagc tgggtgtggt ggcacacgcc tatggtccca gctacttggg 600  
gggctgaggt ggaaggattg cttgaacca ggaggtcgag gctgcaataa gctgtgatta 660  
tgccactgna cccagcctg ggtgacaaag tgagaccctg tcttccccca aaaaaaaaaan 720  
cn 722

<210> 322

<211> 813

<212> DNA

<213> Homo sapiens

<400> 322

aatgaagaac agctggaaga tatgagacag gaacttgtag gacaatacca agaacatcaa 60  
 caggcaacgg aattgttaag gcaagcacat atgcggcaga aggagagaca atgaccaaga 120  
 cagacaagag ctcgagtggg gctaaaaaga aggacttctc cagcaaggga gccgaggata 180  
 atatggtaac gagctataat tgtcagttct gtgacttccg atattccaaa agccatggcc 240  
 ctgatgtaat tgtagtgggg ccacttctcc gtcattatca acagctccat aacattcaca 300  
 agtgtaccat taaacactgt ccattctgtc ccagaggact ttgcagccca gaaaagcacc 360  
 ttggagaaat tacttatccg tttgcttgta gaaaaagtaa ttgttccac tgtgcactct 420  
 tgcttctgca cttgtctcct ggggcggctg gaagctcgcg agtcaaacat cagtgccatc 480  
 agtgttcatt caccaccct gacgtagatg tactcctctt tcactatgaa agtgtgcatg 540  
 agtcccaagc atcggtatgc aaacaagaag caaatcacct gcaaggatcg gatgggcagc 600  
 agtctgtcaa ggaaagcaaa gaacactcat gtaccaaagtg tgattttatt acccaagtgg 660  
 aagaagagat ttcccagacac tacaggagag cacacagctg ctacaaatgc cgtcagtgc 720  
 gttttacagc ttgccgattc ttcagtcact actggagcac tttaacactt gttcacttgc 780  
 caggaaccag gacatnactn caggccaacn ggc 813

<210> 323

<211> 836

<212> DNA

<213> Homo sapiens

<400> 323

attgttattc caataggaaa agcattttat ctcttcactt tagcctttgc tgagtattgt 60  
 acaaaaagaa tgatgctgca ctaaataatg aacttctttt tgaagaattt aacaactaga 120  
 tgcattttgc ctctctggaa tccttttgtc tgtctctttg catcgttgac tcttgcttat 180  
 ccagagatct cagcttaaat atttccttaa aggtaccttt cctgagattc cagctggaat 240  
 tgagtccct tagtatactc tgccatatca cctcttgagc tttataatta cccagctgtt 300  
 tgtatgaatg ttatgtctgt gtctcacatc acactttgaa tttcagagag agcagtggcc 360  
 atgtctgttt cggtcactgc tctataactc cagtgtctct cataacagtc tgggaaataa 420  
 taagtactaa ttaagtattt gttaagtga aatactgctg ttagagcttc tcctaattag 480

agtgttaaaa atgagataat gtgtgcatgg gggaagggga aggagaggga gaggaagtag 540  
 ataaacttgt gatattaccg tgagataatc ctcaagtaag tcctctcacc tccagggcct 600  
 ttgtttcacc ttgnctgtaa aataggacag actgggttca agatgccatt aatatactat 660  
 attttgattc cagtaacaat gatgacagat tatgtaagct catttgaatg gaatatgtga 720  
 cagctagctn cccaaaagaa tatttgacag gtctaaataa acatattaga aatgcttgcc 780  
 aactagatga tattatttan agcctcgtac ccctggtaga aacaagcctn tntaat 836

<210> 324

<211> 809

<212> DNA

<213> Homo sapiens

<400> 324

ttttttcttt tttttaagag atggaagggg gtgggtctta ctttgtcacc caggctggtc 60  
 tcgaactcct gggctcaggc atgagccacc atgcctggcc caatttttga attttttcaa 120  
 aggttctcac tgtattgccc agaatggtct cgatctccag atgtgaagtg atctttccca 180  
 cttggccgcc taaagtgtg ggattacacc gcacctggcc catgcttttc ttttaaggaag 240  
 atagattacc ttatttctct cagtttttat gatagccgta tacctgcaaa gttccatctt 300  
 ccatttcaga ttattttgtt tttattttta attctttcag tgtatgctgt gtctgttaac 360  
 ttgaagtaag gataataatt tcataccttg cttatgctct ccctttgtgg tgaaatcatt 420  
 atactacttt tctttctttt gtttttctt caacttttat tttaaattcc cgggtacgtg 480  
 tgcaggtttg ttacataggt aaatgtgtgc catggtggtt tgctgcacag atcaacccat 540  
 cacctaggtta ttaagcccag catccattag ctattcttcc tgatactctc tctccctctg 600  
 cccctttgta ctacttttca ccattatgat ttttaccata tccacctgcc agttttacag 660  
 ttgataaatg caaggctggg gaacaaaagt agacccccca tctctaccaa ataaaaattt 720  
 ctaaattagc catgtgtggt ggtaaacacc tggggctccg gctgcttggg gctgangcag 780  
 gangattgct tgagcccaaa gtcnaggct 809

<210> 325

<211> 844

<212> DNA

<213> Homo sapiens

<400> 325

```

aaaaaaaaat ggctcctccc agccttgtgc tgtcctcccc tggccaaggc ccggttcac   60
catggagctg gtgccgtgct cacgggcctt cccagttccc acacctctct tctcatagct  120
agtggctcca gtgcccctgc aggccaaccc gtaacaactc agtcccaag ctgaccctta  180
cctgtctgta aaagccttcc ctccaatca gcatccggtg tttataacca catcctgagc  240
cagggtgtgt ttccccagaa atgtacccc cttgacatgc tctatccacc ttgatcacac  300
ccctcaccgg ctctttgacc tctcaaaac ctccctgcag aactcctcct tgtcttctca  360
ctctggcagc caccctgtc ttcaattcct tctttacctg gctccactga gagacctgag  420
ccctggggaa tgcaggtgtt gtgccccct ctgccctccc actggcccag cccttggatg  480
catcattaga gatgggtgcc agtcacatg aggaccact accttggtc ggccctcttc  540
ctgcattcat ctttctaggg gcccagtg gacacaggt tcttcaggaa aaatgcagct  600
ccttaccctt cctcttcagc acctgctttt catagagaac cctncttcta tcttgcatgc  660
atgacagggg tcccgtgggg ccatgcaccc agcttccttc tctctcctgg catgttncac  720
ctgggggtgg aagaactgcc atttccatct cticagagct ctttcccagg aacccttcct  780
tctaggcatg gttctgtgnc ctttgtcttc cttagcacag tgccaatctg attttctctt  840
tctt                                     844

```

<210> 326

<211> 831

<212> DNA

<213> Homo sapiens

<400> 326

```

atacgactat gactatttct gcagtaatta ttattgagac ttactataat aatgataagg   60
ctgtatataa attatacctt actaaaaatt taaaatctag gaatttactg agagagcata  120

```

aagtatggtt gtaatagaga aaacaaatga ttgaaatggc ttaaatagcaa gcctttaata 180  
 ttaattttga gtattttaac gcaaataaaa ccaattatga cagtgtgctc aaattggtaa 240  
 acaaccaatc tgtgacttta tgaaaatata tttatgacag tcatacttgc cttactctta 300  
 agtgtagtat ttgtccttaa gttgggagca ccataaatta attttaaagc aaaacatatg 360  
 accctcatcc aatgttttaa atgaattgct tcctactagg aaaacaaaac atctcaggac 420  
 atcaaatact tctagtaatc aagatgtttt gtttaaattt gctaatagtaa gcttcaactc 480  
 tatttggttg cactttaaaa aagcatacta gaaaatgggg aatatttgaa acatgcattt 540  
 ttaaaagcta ggtgttatct tactcagaag atgttaaaag cttctttata cattttattt 600  
 gaaagtaatt tccaaaaaag ggatgcttgg tgggtatatg aaaagggtgc agtatcacta 660  
 atcatcangg aaatacatat caaaaccata atggaatatt acctccagct ggtaggatgg 720  
 cttttatcaa aaagaccaa aatnacagta ttantgagac tgtggaagaa aaagaaccct 780  
 tacaccact gataggaatg natatcagta taggcttatt aaaaaccctt t 831

<210> 327

<211> 834

<212> DNA

<213> Homo sapiens

<400> 327

attctgaaag ttttctgact ccatatttcc aagaaacttg tcccactcct taatatttca 60  
 aaggactacc atgccaaata aagataaatc tttattttat gtagtgaaag caacaatgta 120  
 taatcttctc ttttctactt acggcttggt aaagagaccg gtaactgggt ctaatgtttt 180  
 gaaatctgca tgcttaccaa tgatgtcttc atgagtttagc tgtaggctaa tggaaaaagg 240  
 aagcttatca tacttttttag aactttttat aattaaggctc agacctctat attattatta 300  
 atattacacc tcagtatttg caattaacat tgagacatcc ttgcaacaaa ccctttggat 360  
 attaacaaat attgacacac atataggaat atattaaaaa tccttattaa ggggaacacc 420  
 aattagaatc accataaatg atgtttatac atttcatcaa gcaccaagag gccataaatt 480  
 atttgatga gattagccac ctaaagtatt acatgaaatg accttagata ccaattttgt 540  
 tgaacaagct ttccacagta cttatcattt actcatacac tattaaaagt ttgacattca 600

ggatattagc tacaactctt gggtatatgt gagagaaact caactccaac tagcaaagaa 660  
 ggaaattaat ttattggctt atctaactgc aaagtccaca ctgtagggtt gattccaagc 720  
 acagctagat ccagangcta acataatggc atcaggactc tgnctctctc tttcagtcct 780  
 ttgcaaggct acttcataa gcnttaatgg attgctcaaa ggcagccctg aagt 834

<210> 328

<211> 796

<212> DNA

<213> Homo sapiens

<400> 328

gaattgcaac ggcagctgcc gggcgtatgt gttgggtgcta gaggcagctg cagggtctctg 60  
 ctggggggcca atcgggacca attttgagga ggtacttggc cagcacttat tttcacctcc 120  
 gacctttcct tccaggcggg gagactctgg actgagagtg gctttcacia tggaagggat 180  
 cagtaatttc aagacaccaa gcaaattatc agaaaaaaag aaatctgtat tatgttcaac 240  
 tccaactata aatatcccg gctctccgtt tatgcagaag cttggctttg gtactggggg 300  
 aaatgtgtac ctaatgaaaa gatctccaag aggtttgtct cattctcctt gggctgtaaa 360  
 aaagattaat cctatatgta atgataatta tcgaagtgtg tatcaaaaga gactaatgga 420  
 tgaagctaag attttgaaaa gccttcatca tccaaacatt gttgggtatc gtgctttttac 480  
 tgaagccagt gatggcagtc tgtgtcttgc tatggaatat ggaggtgaaa agtctctaaa 540  
 tgacttaata gaagaacgat ataaagccag ccaagatcct tttccagcag ccataatttt 600  
 aaaagttgct ttgaatatgg caagagggtt aaagtatctg caccaagaaa agaaactgct 660  
 tcatggagac atagagtctt caaatgttgt aattaaaggc gattttgaaa caattaaaat 720  
 ctgtgatgta ggagtctctn taccactgga tgaaaatttg actgggactg accctgagct 780  
 tgtcattgca cananc 796

<210> 329

<211> 692

<212> DNA

<213> Homo sapiens

<400> 329

```

actgggcggc ggaagttcga cggcgccggg cgagtggctg ttgagcggcg ccgcgggagt 60
tccgcagggt tcccgtgttc gcagcgggagc cggaggccag ctgaaccggg ccgtgggata 120
ccggaatagga ggaggagggg acccatagga cgcgtaaca tggacctgga aaacaaagt 180
aagaagatgg gcttaggtca cgagcaagga tttggagccc cttgtttaaa atgcaaagaa 240
aaatgtgaag gattcgaact gcacttctgg agaaaaatat gtcgtaactg caagtgtggc 300
caagaagagc atgatgtcct cttgagcaat gaagaggatc gaaaagtggg aaaacttttt 360
gaagacacca agtataccac tctgattgca aaactaaagt cagatggaat tcccatgtat 420
aaacgcaatg ttatgatatt gacgaatcca gttgctgcca agaagaatgt ctccatcaat 480
acagttacct atgagtgggc tcctcctgtc cagaatcaag cattggccag gcagtacatg 540
cagatgctac ccgaggaaaa gcagccagta gcaggctcag agggggcaca gtaccgggaa 600
gaagcagctg gcaaaagcag cttccttgca catgaccagg acccttcaaa gtgccatgag 660
ttgtctncca gagangtgaa ggagatggan ca 692

```

<210> 330

<211> 743

<212> DNA

<213> Homo sapiens

<400> 330

```

tgacaataaa tattctagtt aaaaatatgg gctatggcac agtggccac gcctgtaatc 60
ctaacacttc aggaggccga ggcaagtaga tcgcttgagt ctgggagttc tataccagcc 120
taggcagtat agcaagacct catctggaca aaaattttaaa aaattagctg ggtatggtgg 180
ttcatgtctg tgggtcccagc tatgtgggag cattgcttga gctcaaaagg tcgagactgc 240
agtgagccat gatcctgcca ctgcacttca gcctgggtga caagagtga accccatctc 300
caaaaaaaca tatatataaa taaaatatgg gccgggcaca gtggctcaag cctgtaatcc 360
caggacttcg tgaggctgaa gtgggagggt catttaaggc cagaagtttg ggaccatcct 420

```

gggtaacata gcgagaccct gtgttttaca aaaattttaa aattagccag gtattttggt 480  
gcaggtgacg gcggggacag gggatatcagt ggggtgaggt aggaggatcc cttgagccaa 540  
gaggttgaga ctgcagttag ccatcattgt gccactgtac tctagcctgg gcaacgagcg 600  
aaactccgtc tcaaaaaaca agaacaacaa caacaaaaaa aaccatatgt aagggttaact 660  
cgggaatggg aaaagccaag tacttaagga tcacaaagct ggttttgccc ttttgggggn 720  
tctngggaaa tnccttggg aaa 743

<210> 331

<211> 830

<212> DNA

<213> Homo sapiens

<400> 331

ttgcaatgta aaaatatatc ttggtctctg catgatgata tattaacatc tataccatgg 60  
aactttttaa aggaaaattg tgtggtataa ttaaaagaat attgcatgtt atagagaaac 120  
ttcacctgtt gatttagcag gtgccattgt gtagatgcta agcaaattctt aatatgtttc 180  
cttggatttt tgaaatttga atttgtttg taactttgct agttaaaga tttagaggga 240  
tttggctggg cgcatggctc acgcttgtaa tcccagcact ttgggaggcc gaggtaggca 300  
gatcacgagg tcaggagtgc gagaccagcc tggccaatac agtgaaaccc tgtctcttct 360  
aaaaatacaa aaattagctg ggcctcgtgg cgggcgcctg taatcccagc tacttgggag 420  
gctggcagga gaatcacttg aaccagggag gtggaggttg caatgagccg agatggcgcc 480  
actgcacccc agcctgggtg gcagagctag actctgtctc aaaaaaaaaa aaaagagtgg 540  
gatttatcat agtttttttt tcttaactgt tattgactat ttttaatttt tattttttaa 600  
ttcagtggcc tctcaggatt attacctgca ttttttttc aggaaaatcc caattctgca 660  
actaactctg nggccttaga caagtctctt gccttatcca gggctgggtc cttggctgta 720  
aaataaagag ttggctagat gatctctaag gtccctttta catctatagg ttncttggg 780  
acctatatta ggggttgatc caaaccantt taatatatct taancccggt 830

<210> 332



<211> 891

<212> DNA

<213> Homo sapiens

<400> 332

```

ataatatgtg caaaatcctt aacatcgcat tgaaagattc ttggatctg atcttaccat   60
atatttctag cctaattaat cttctacatt taccctgcca gttctctgtt cctactcatt  120
gattccctaa caatgtaagc agagtccctt tgtaagtca ttcacagaaa gttttcccta  180
ttctttctcta tctgaaaaaa aatgtcctct atccttggag atctaacca aagtccatga  240
agcattttac tgatactttc attttctgtt gcagcacttg ctatttcttt tatgccatgg  300
agtgggcaca ttttgtatth gtgtcttgta ttattgtgac ttgatccttg gattggatct  360
tattttactt ttgatgtatg tggtagtcag aggccctacca acagatagaa cccacacagt  420
aatttggaga aagttttaca taaagaataa gtagatataa tacagtatth atgtaatgga  480
agattagcta gtaataacta aagaggagtc taaagaatat agtaataata attataagga  540
gaaaccattg cctctgaagc tgagaggtag ccaaaaagaa cctcttcac cctgcaagg  600
ctgatatcca aactttatth gtgaggacat gcccgaggct cactggcttg tggacaaatt  660
gctgagggtg tggaacagca ggacttgntg gaaatgtth cctctgggat tccaaataag  720
tcacccatag gggaggatcc taaccagca agcactcctc ttcaaaggcc atcttaaggg  780
gtgccatctt cgtagaaggt gccttcaatt ggccaaccac ttnactggg ntaatgccta  840
tcctggaaaa gggtnaatgg gaaaaatgct attcccccaa ggagacctg g          891

```

<210> 333

<211> 815

<212> DNA

<213> Homo sapiens

<400> 333

```

ttttttttcg ctctgtgccc gccgggtggc gctcaccacc tccccggaac acgcgagtct   60
cctgtcgcgg ttccggtcgg aattaccccg tggagcacgc cgatatggct gcgctgacac  120

```

tgaggggtgt ccgggagctg ctgaagcgtg tggacctcgc gacgggtcccg cggagacatc 180  
gatataagaa gaaatgggct gccacagagc ccaaattccc tgctgttcga ctggctttgc 240  
agaattttga catgacttac agtgtgcagt ttggagatct ttggccatca atccgtgtca 300  
gtctcctctc agagcagaag tatggtgcac tggtaataa ctttgctgcc tgggatcatg 360  
taagtgctaa gctggagcag ctgagtgcca aggattttgt gaatgaagcc atctcccact 420  
gggaactgca gtctgagggt ggccaatctg cagccccatc ccctgcctcc tgggcctgca 480  
gtccgaacct tcgatgcttc acttttgaca gaggggatat cagtcgcttc cctcctgcca 540  
gacctggcag cctgggtgtc atggagtact acctgatgga tgctgtcctt tgctgtgttt 600  
ctggccctcg gccctgcagcc tggggacatc gtgcttgacc tatgtgcctg aagagatcan 660  
ggatggaaat caagttcgag ttacctcatg ggatggcagg aaatggggag aactggaggg 720  
ggacacctat gaccgggttg ctggtggatg tgccctgtac cacagaccgc acttccttta 780  
tgangaggag aacacatntt taaccggnca aggaa 815

<210> 334

<211> 801

<212> DNA

<213> Homo sapiens

<400> 334

gaatactttg gatgagacgg gaggttttcc cattctgatg ctaggatctt gttcatgagt 60  
taatgaagac agttgaggaa ggtaaggagc tatttctact tgattagtga ggcttcagtc 120  
tatttcaaca ttcaaagtt ttcatgata atttgttcat gaaaaaaaaa agaaaacaga 180  
ggagttgctc cagctctaaa aaaaatttga aaaccacacc ctgtgctaata tgcaagtcta 240  
gtctactctg gtgctgctct gtggtattgc agacatagag tctgctctgt ggtacatatg 300  
gaccaggtct tatgatgatg ataggccatg tttagtggct tcacacagag gtacttcaga 360  
gcttttattt ggattcctcc cacttggata ctgttctgac tgcittatca aaattaagtg 420  
tctttgcttt caccctctc ctaaaagtca ttcaacctaa aagtaaaatt ttggggggca 480  
ttgagggggg aagaagcaga aaatgttctg tttacaatg agatctacac cagatatctc 540  
atcttgatta tttaaatata aaagatacct tttgctcaca gtagttggct taaagtactt 600

catgatttat gaggggtgat tgctgacaaa gtactgggag gagccgtttt gagtcaacac 660  
gaccatttgc atctgccttc acttgccttc ctctcttatt aaattgagct atcctatggt 720  
gtgggttttt atagtaatac tagaactctg tgagtcatac cagagcagtt gngccgnctt 780  
cactacattc tcacntgct g 801

<210> 335

<211> 821

<212> DNA

<213> Homo sapiens

<400> 335

taaacagagg cccacagcta gtttgcagaa ccaactcaatt ttaagtgtg tttaaattgc 60  
agagcaaata atcctgtgtg ggaactgttg ttacaggaaa tggagcactc taacaatggt 120  
tacttctaaa cttcgttgaa tgataataga aagcacccta attgacttgg aaaaaaaaaa 180  
cagcaaaagc aaaagtagca acatatgtca acatatgtca ctgaaatagg aaacagtcac 240  
tggaatgttg cacagaggct aataactata gactgttggg tacagtgggt agaggagccc 300  
catttttaggt ctttctttta ggttttttgt tttcattact ccaagtaatc cttgacccaa 360  
gaacaaaggc ttgttgtatg agttccactg ccagatttat gggatgcctg gatcattcag 420  
aaggatgctt caactattat ttgtcaggtc caaaggctgt acttgataac cccattttct 480  
atgtatgggg tagtctaata tattatttta tctactttat tttcccttt tcagaaagtc 540  
cttagtgcaa accaccattg gaatctagcc agaaatgtct gtcagatagt tagaattgta 600  
acatctaaac ctgccacgga tcgaatggta cttacaggta cctctcttag ggactctgtg 660  
atccctaaaa tatcagaaga aaatgtctgn ctttctgcca aatatctact tgacttgggg 720  
gaagtcaaaa ataaaagtag gtgtccaagg attttacttt tggcgaaatc tgacgtctcc 780  
tgagcttatt ttcattttgn ccttggacat acatanngct t 821

<210> 336

<211> 688

<212> DNA

<213> Homo sapiens

<400> 336

```

gttggcctac tggatgaagga aaatctcaag ggaaacctta aggaatggct acctacagtc 60
caccttttaa ctgagaccca cacggttgca tgaccttcat gagttggcca tggctctttt 120
ccacgttctt ttcattcccag gactccggct gaaggacctg ccattctctg ggagactgct 180
atcctttagt cagaaggaaa gggcgatggg ggaatccata atggcttcta aagctgctgt 240
tttgaagtgc atgtttcact tcctgctcgc gtttcattag tgaaaataag tcacatggcc 300
aagcctgata gcagcggagt ggggggtgatt aattctctca caggaggagg tagaaatcag 360
ttaggtgcaa gcaacaccct ctaactgcga gccattggag gcttttgagt gggtaatgac 420
ataatctagt ttgcatttgc ggaagatccc atgcagaaac aaatgtcaca ctgcagctgc 480
aaggacagtg aggagggaga tggccatggg gccttgggtc ccagagtgcg ggcatgcgga 540
ggcgtcaatg catctacctc cagcacacca ggcatgatgt caggtgcagc aggaggtacc 600
tggccctttg ctacacagac cacatgggtc tgctggggac aagacctang gaacagntca 660
ttttggtaca gtgtggttgg ntcctgga 688

```

<210> 337

<211> 803

<212> DNA

<213> Homo sapiens

<400> 337

```

ttagattatg acataaatct tgtaaaaacc tgtcagttat tttcatctat gagagaagag 60
gagcccaaac tctcggccac ctgttcttaa ccagaaaacc cactgacttt gaaaatctca 120
cctctgccac ccattctactt gcattcgtct ttggcagacc tcaagataaa tatgggttaa 180
tgcctgcatg atgcctctga attcaggaat tgcagggaaa actcggggct ttgtgccagt 240
ctctaagttg gcaactttgg ctgaacaaat gagtagtggc ttcagtgtcc ttgcgtacac 300
attctgtgga ttgatttaat ggagttgtca gcatgatcat catcttctag ccaggggcat 360
agttgccaaag gccatttacc tctttctaag aagaaacaga attatgtgta tatatgagag 420

```

aaagaaacaa gaatgcgtga atgaggatga agaaacattt accccatgta ctcaagacat 480  
 ttcagtttta aaagtcactt tcctattaga cttcttgaaa aagattctca catagcctct 540  
 atgtaatcag acaaattgaca ttgatttca agagcagagg ggtaaaccatc ctctgctaata 600  
 cgacaggtag cagggtgtcag aggaggcata atattaatag cgccaccttc tgttgggtca 660  
 gtggagatgg gtgaggagca gcacagagca gcagggatca tcacatgcag ncaaacttgg 720  
 cctctgaang gggaaggtag tgggaatang tggtagaga actccatttt tctcttggcc 780  
 tgggtttata tttcggaggg aaa 803

<210> 338

<211> 790

<212> DNA

<213> Homo sapiens

<400> 338

aatttagtgc tactgaacaa ttcagtagtt atttctgaac tttgctgcaa agtgctcttt 60  
 agttaagca cattaagaag ggtcactgct taattgcttt gtaaaatgaa gcaatggat 120  
 tttttatccg atatagtga atttaaaagt tttcctacaa agtgagtta tattgttgcc 180  
 taaactatgt tatgtaagca aaggttttgg aaaggcggga gggagtctag attcggcgag 240  
 agtgtgcgtt tgtgtgtgtg aatgtatgaa aagtttcccc attgggttat tcttaagatg 300  
 tgtttattgt aaagttttct acgttttgcc cacagtaaata gtacaacttc gcaattgtag 360  
 gatttaattg attgaattcc aaatttatac tgtctcttcc cttctgcaga gacattatgc 420  
 cactgtaagg tgcattgaca gaaaatacct ctgaggttga cttgttaaat aactgatgaa 480  
 tgttatttca cactgaatct caaagcagtc atttgttttg cgggttaggg gaaagttttg 540  
 ttttttgctg gtgttttttg ttgtttttta ttaggcacac taagagtggc taaatttggg 600  
 ggaattgggtg gataggaaaag accttgaaaa gtgatgtgta gatgaaaaca caaggatatg 660  
 atgttggta cagagttcag tttaacaag ggaaatttgg ggattttttt ttttttactt 720  
 gcatggctta tgggtagcta tcaaanggtg tacaattat tccagctttt cccaatctaa 780  
 ntatattgg 790

<210> 339

<211> 832

<212> DNA

<213> Homo sapiens

<400> 339

```
tggatcacca cctgggccag cttggccgaa ttcataaacc tgaccacagt tatggtgtga 60
agtttgtgaa gtcctttata aactcaatca ggcggtgcaat caacaaatat ccaccaataa 120
acttaaaaaat aaagtgcac agacttaact ctatagatcc aaagcagccc ccacgacat 180
tccgaagctt tgttcctgga ccacttaaag ctaccctcaa agaagatgta ttacagaagg 240
caaaattctt tcaagataaa aaatatcttt caagagtagc aagaagtggc agagatgatg 300
ctattcaaaa ttttatgaga agcacctccc atacctttaa gaatggaagg atgatagaaa 360
gtgctcccaa acaacatgat taaaaaatg ctigaacaac ttagccttag gaagcatggt 420
aagactctgg acttaaatag taactaaatc tgctgccaga actcaagcaa cagtttgtag 480
gttatcaggt gacttgaccc cctgcattca ttggtattaa gatatatctt gttcatttat 540
ttgaccactc ctgacaattc cagcactcta cgactgatat gtcgaagaac tgtttcatta 600
gaagacagaa gaatgaaaga agtggtttga aaagtctaata ggagatataa ttgaaggta 660
aaatttatat gatgtatgca tatgtgtaca tgggtcaatg ttaattcttt tatctctgtc 720
cagttcattt tctgcaaacc catcctnctt tcctaattaa gtaatgncta atgctcatct 780
atttagtcaa aggtatTTTT taatggTTta agctacttca aaanttatcc ta 832
```

<210> 340

<211> 871

<212> DNA

<213> Homo sapiens

<400> 340

```
tggaagaata agtattttgt aaaaattcac ttgataccac attttcattt ctggaacagg 60
atagcaatca ttcatttcta tcttgtgtct gtgtccacca caaccaagac cagatgcac 120
```

tgatgaacat tctggaattc tgaactgcag ctagcctgct gtgcaatagt acaagtggga 180  
 ggacgtcttc ccagggctgg gctggttctc aactagtgcc cagatgcaaa aggactgagg 240  
 catcactttc agactgcata tatttttatt catataaagt tctttataat actttatttt 300  
 gtgggtgttaa gttccaccag ttattttacaa atgatgtaaa aagctttaag tgttggttaat 360  
 ttctaaagtg ttcttgcggtt ttcagaagtg taagtggatc tcagttgatc tgtcacccca 420  
 aacctcaaat gatccatcca ccttgcttgg ccatcctaatt cacctgctct ccccgatgac 480  
 tattttggac ctttcctctc catagatgac ttgcaatct acagggaataa tacttatgca 540  
 ggacatctta tatctcccc ttaccacgta cagttctctc cacagctgcc agcagcccta 600  
 acctttttgt ctctccacct gtgctttgga tgctcttctc ccagcctttt caggatcttt 660  
 gtctgtcctc ctatattaat gtattcaatt attctctcag ctagatcctt gctacttggt 720  
 tttaaattta agactaagat taaacaaaac tatctttcac aaccacaaac ccccttccgn 780  
 caagcaacta agaatttctc ctcatctca gccagttttc ttgcagcagt atcttttagtc 840  
 attggcctca atcatctaatt ccttatctta a 871

<210> 341

<211> 871

<212> DNA

<213> Homo sapiens

<400> 341

aggcttatca aagtcaagca ctgtgtcacc tggtaatgca aacccttcca gcattctctgc 60  
 ctttaggttt taggggggaa tcgtcaaaac agacatgcag cccactacaa agtacttgaa 120  
 agcaataggg caccattcaa gcacacgcct gcatttactg ggctacgttt atttagggca 180  
 ttcaggtggc tgtaattatt gtgcataaat agttttctaa aaagcataaa actaaaaact 240  
 tgatccatgg aaacacagtg tggtttagga tggagatcgg atttcactca cctcaaaata 300  
 actcctgggtg tttgcctcca agaccatta atttatgtta tctcttgctc tgtagcagtt 360  
 tggatttgct acacttagca aagtaatttg gtttcccaca ggttttgttc tgttttatag 420  
 aagcaagaga acggttttgt gtttcagagc atgaatacat tccttcagaa atttagccag 480  
 catttcagaa ggatatgaat ttttattttt agctattttac acctgcctga aaggttgatg 540

ctgctaaaca ttgatattac ttgaaaagtt gtgccaagg catattgctt ctttcctagc 600  
taggaattga aatgtttatg aagcttgctg aaaatttacc aggttaccaa aataagagtt 660  
tatatctctt atgtagtgac taacagaaat agatttatgt attcaaccaa ccgtccaata 720  
tttattaagc cactaatata tgcattgaat tatgctggat ttggggtgac atcagattat 780  
tcaacataca cttctcctgg ttcagttcct tttaacatgg tattactggg cacttacaga 840  
atggcaaaat ccnttaata agactcaggc c 871

<210> 342

<211> 870

<212> DNA

<213> Homo sapiens

<400> 342

tgcctcaacc ataagcgaca ttgaaactgc tgcagacaag tgtgaggaga tggaggaagg 60  
ctacatccag tgctccaggt ttctatatgg ggtgcaggaa aagctgggtg tgatgaacaa 120  
aggtgtggcg tatgctctgt gggactacga ggcccagaac agtgacgagc tgtccttcca 180  
cgaaggggac gccctcacca tcctgaggcg caaggacgaa agcgagactg agtggtggtg 240  
ggctcgctt ggagaccggg agggctatgt gcccaaaaac ctgctggggc tgtatccacg 300  
gatcaaacc cgacagcgaa cactcgctg aacttccttt tggagcaccg catggtcttg 360  
ccagctacca ggagccactt aagagattat tgtgctgttt tccaggaaag ctgcagctag 420  
aaaatggtct taatggtgct cactttagca gacagcgctc acaatgtgaa tcctacagtt 480  
tccaggtgag gccctttctc cagtttgccc attactggg agaggtactt tcgctccaa 540  
ggactgaatt ttgccaatta ctataaatcc aaataaatac ccactttcaa aacaccacc 600  
cctcttgcca ttaagaagtc ccataacccc cggttggttg ccagtgaaga cagaagctct 660  
tactgacttg gccccgaggc catcaccccc ttcagcagtg aacactgtcc gccgctgtga 720  
ngcctgctcc cctgcgaccg cctgcccccc gtcaccgaat cggacactca tcctttctac 780  
actttccaca catgatcctt ctttccttta tcaccaaagg agcctntgta tggnaacatg 840  
tncatgggtg cttgcccagtg tgtatgcctc 870



<210> 343

<211> 869

<212> DNA

<213> Homo sapiens

<400> 343

```

gaattcaaaa gatgcctatg gttggttaca cagcttttga tttgcatagg tattcgaacc 60
cagggttttgc tgacttcaat gctttacctt aaaagatgct tttttagaat ggtagatggt 120
aatagatggg ctgtgtaatt agtttccctgg gccctctgca acaacataga aaaaaatggg 180
taacgtaaca tttattctct cacaattcca gaggccagaa gtccaaaatc aagggtgtcag 240
cagggcgatg ctctctgaag gctctagagg agaatccttc cttacctctt ccaaacttgt 300
ggcagttctc agcagtcctt ggtgttcttg gctttagat gcatactcc aatatctgcc 360
tccatcacc cccagctgtc tttcctcata tgtttttgca tcattctacc tctgcgtctg 420
tgttcaagtt ttcttctgct tatgaggaca tcggttatat ttgtttagga gcctacccta 480
ttccagtgtg atctcatctt agttacatct accatgacct tatttccaaa taaggttaca 540
ttttcagaca tggtagttaa gactttaacg tatatttttg gggttgagag gacacaattc 600
agttggtaac agctatgaca aaattgggta aattgatgaa catcttaaaa aaaacacagt 660
ggaagaggca ggcactgtag agtgacaaaa tacatcttta tagaaattcc atgttaaaat 720
tattttgngg tataataatc aaatttaaat acctaatata tatattacca ttaaacagga 780
tagtcagcac tacctagttt ttttaactgaa tttgtaatgg ccatatgggt atggttcttt 840
agtaatactt gaactaaang gaattgcaa 869

```

<210> 344

<211> 861

<212> DNA

<213> Homo sapiens

<400> 344

```

tttaaaacaa aaatttcctg cgtgaaattc tggcttagtt aactttttgg tctttctctc 60

```

ggggcttttc ttgttcttat aaaatactgt aaattacaaa tggaaattta atgcagaatt 120  
 aaatttctag tgtacaatat ttgtaagaca agaagaaaat ttccttttcc cagatctcag 180  
 gaactacctt gttcctgtta acttcttgaa ctggctagtt gctcaaaggt atgtatacag 240  
 gccttttaggg aagagcagtt tttaaaattt tcctttctga tcattatata cctgtcagat 300  
 gacaatagat aatcttccaa agttgctacc taaaaatcct aggaaagaaa ctttggtgaa 360  
 catgactgcc attcccatta attgctaattg aaaaacatca gacttgctta gtagaaaaac 420  
 acctaatttg gtataacttt ctgcagttt atccatatta tgtgcttggt acttaatgta 480  
 attaaaagca ttttaaaatt ctactttttt cgtatccact tttataactt gctacttcct 540  
 aaatcctccc tcaactgttta tttcatccat ctactcattt cccatcatcc aaagtttagcc 600  
 tctccttgta taccaggcac tgtctgattt ccatgtattc cttttatttt tactgtgggc 660  
 ctttgtgctt agtatacttt tacttcatat aatgtgatta acaaatgaag tgattatcat 720  
 atggagttta aggaaattag atgtatcttg caattacttt gaaatctttg ggaaacctta 780  
 agaagatgga tctgtttcat tttattacca catcttgga tgnatcatga ttcctaaaat 840  
 ttcttgccca cccacatntt g 861

<210> 345

<211> 869

<212> DNA

<213> Homo sapiens

<400> 345

gaaacatatg aagctctatt agccagattt cccaatcttc gatttgcata caaggatcca 60  
 gagaagaact ggaatagaaa ttgtgtgaaa ggacttgttg cttctctgat tagtgtgaaa 120  
 gacacttctg caaccacagc tttagaatta gtggctggag aacgactcta caatgttgta 180  
 gtagacacag aagttactgg taaaaagcta ctagaaggagg gggaactgaa acgtcgatac 240  
 actataattc cactcaataa aatttcagcc agatgtattg caccagaaac tctgagagtt 300  
 gctcagaatc ttgttggccc tgacaacgtt catgtggctc tttccttggt tgaatataaa 360  
 ccagaacttc agaaagcaat ggagtttgtc tttggaacaa catttgtttg tgacaatatg 420  
 gataatgcc aaaaagtggc ctttgataag aggataatga ctagaactgt aactctcgga 480

ggatgatgtgt ttgatcctca tgggacattg agtggaggtg ctgatccca ggcagcttcc 540  
 attttaacca agtttcaaga actcaaagat gttcaggatg aactgagaat caaagagaat 600  
 gagctgcggg ctctagaaga ggaattagca ggtcttaaaa acactgctga aaagtatcgc 660  
 caactaaaac agcagtggga gatgaaaact gaagaggcag atttattaca aaccaagctc 720  
 cagcaaagct catatcacia gcacaagaag aattagatgc ccttaaaaaa accattgagg 780  
 aaagtganga gactttgaaa aacactaaag aaatccaaga aaagcngaag aaaaatatga 840  
 agtattggaa aataaatgaa aatgcngat 869

<210> 346

<211> 813

<212> DNA

<213> Homo sapiens

<400> 346

atttagaatt taagcctaga tacttcagca gtttttctat aactgaacaa agaaacaaag 60  
 tagctcttga tgggtccagta aaatgagtct aaccaggagc tccttacagg ttttatatat 120  
 agtaaactac attttcgtgg aatatgagaa ttacgttaaa agagtaccaa ctaagaataa 180  
 ttttattgtt catggaagat agggtaaate tcaatactgc cttatttata catgtactaa 240  
 tcaaaagagc cattaaactg tttttccaca ctattatact aagcacattt cacagcttta 300  
 catgtcatct gggcccagtg tggtgactca tacctgtaat cccagcactt tgggaggcca 360  
 aggcaggagg atcactgagc aacattagga gacctcatct ctacaaaaaa cttaaaaatt 420  
 ggtcgggtgt ggtgatgggt gcctgtagtc ccagctactt gggaggctga ggcaagagga 480  
 ttgcttgagc acgggagggt gaagctgcat tattgagcca tgatcgcacc actgcactgc 540  
 agcctgggag actgagtgag accctgtctc aaaaaaaaaa aaaaacagtt gtttcaagtc 600  
 agtaaattct attttggata agtagtaaag aatgggtttt ggggggtgta tttttttaa 660  
 tctttagagg gacaagtaat ctattccagc aggtagatct aatctttctt ttcattctaa 720  
 gnttatactc taaagnttta ttttgcaga ctttttacag ggtaccttta gtggttgcca 780  
 atctggcatg tctgacaact gggttataaa ctg 813

<210> 347

<211> 817

<212> DNA

<213> Homo sapiens

<400> 347

```
acgtggacgc gtctgggctg ctggaggcag cccgagccgc cgccgtcggg gtcgccgcca 60
ccaccacat cggagtcacg agtcccgcgt ctgtccgaag tcgccgtctt cgggctgtct 120
acgtctcttc ggagggcgcg cacatggcga ctcaggcgca ctccctcagc tgctcgtgag 180
gaaaccctct atcctcaca tacacccact gctacatgtt ctcatagacg cctctccccg 240
tccttatcgt agtactcact gcaccctgtc gttgcttaat tttcctctct cttcacctat 300
ggtggtaggg gccatctttt aagatctggg gtgtccatga tcttaaagtt ttttaagttc 360
tattaaaaat caattatatt atttgtgaga gaagtttttt tttttcttt ttgaaatacg 420
taaaataaag ctggctggct tcttgaattt tagtagtgca ttgtggaaat aacacaggct 480
taggaattag ctaigtgttg atcccagctg tgtagtagc attgtgctgg cctctgtgcc 540
ttctgaccct tagtttgctc atctgaaaat gggaattacc ttgtgccac cctgggattg 600
agaagattta ttaaacttgt gtttgtgctt aggattcttt ttagttgttt gatccttggt 660
aaagattcaa agcagatttc tgcataacag gttaatgtca gaatgagttc accgtgttnc 720
aacgtggagt gccaggatcc atctagtcgg cacagaggan aaagcctggc tgactggcag 780
gtcctgaanc cctgtgtaca ccaaaccaaa ctgagtc 817
```

<210> 348

<211> 784

<212> DNA

<213> Homo sapiens

<400> 348

```
cagagttgcc cagggaagc agctatgaca tctacagagt gccagcagt cagagcatgg 60
aggatcgtgg gtacagcccc gacacgcgtg tgggtccgctt cctcaagggc aagagcatcg 120
```

ggctgcggct ggcagggggc aatgacgtgg gcatcttcgt gtccgggggtg caggcgggca 180  
 gcccgccga cgggcagggc atccaggagg gagatcagat tctgcaggtg aatgacgtgc 240  
 cattccagaa cctgacacgg gaggaggcag tgcagttcct gctggggctg ccaccaggcg 300  
 aggagatgga gctggtgacg cagcgggaagc aggacatttt ctggaaaatg gtgcagtccc 360  
 gcgtgggtga ctctttctac atccgcactc actttgagct ggagcccagt ccgccgtctg 420  
 gcctgggctt caccctgtggc gacgtcttcc acgtgctgga cacgctgcac cccggccccg 480  
 ggcagagcca cgcacgagga ggccactggc tggcgggtcg catgggtcgt gacctgcggg 540  
 agcaagagcg gggcatcatt cccaaccaga gcagggcgga gcagctggcc agcctggaag 600  
 ctgccagagg gccgtgggag tcggggcccgg ctcttcgcg ggcttcaatg ctcgggccga 660  
 gttctggcgg ctgcggggtc ttgcgtcgag gagccaagaa gaaccacttc aaccggancc 720  
 gtgaggacct ttttaantttt gaacccgaca gggggccggt acccgncctt acgaaaccaa 780  
 atgg 784

<210> 349

<211> 712

<212> DNA

<213> Homo sapiens

<400> 349

tatttataat atgtggagga gagagagctc accatgctca ggtaaaggga tgaagcctct 60  
 ggtatgtcag aacctatgtg tcttccatga gacttccttt gtgaagagca tccatttaaa 120  
 agacttttat gaatacatgg tttcaatcaa gtccccagag aacacatttg tcttctgagc 180  
 tgctggcagt tttgagaatc tgatgacctc cgagggggacc ctgcactcag ccatcaaagt 240  
 gttcctgccc ctctggacac tcataattca atggtagatg caggtggagt tgagaacatc 300  
 acccagcttc cccaggagct tcctcagatg atggctgcag cagccgatgg tttggggagt 360  
 atagcgatag acacgaccca gctcaacatg tccgtgacag atcccacagc ctgggctaca 420  
 gccatgaata acctgggcat ggttcccgta gggttgcctg gacagcagct cgtgtctgac 480  
 tcaatctgtg tcccaggctt tgatccaagc ctcaacatga tgactggaat cccccccatt 540  
 aaccaatga taccaggcct tggactggta cctccccac caccaacaga agtggctgtt 600

gtcaaagaaa taatccactg caaaagctgt actctttttc ctcaaaatcc aaatcttcac 660  
ctnctttcac aagagaacga cctnctgggt gtaagaccgt gttgtcgga ga 712

<210> 350

<211> 844

<212> DNA

<213> Homo sapiens

<400> 350

tggtataatg caaagcctat caaacttaaa attagcttaa tcctgaaaga tgtatattgc 60  
ataatcaacc tgtcactttt ttcaaacacg atttgggagg gtattgaggt cccatgtaaa 120  
ttttaaaata aaagacaaac aggaactaat cttttagtaa aaattatttt gttttcatat 180  
aggaaaacaa tgccttctgt catttacgga aaacacatgg gcaatatgggt tggttgttca 240  
tttgigccct ctatcctata ggaagaatgt gatcttttaa ttgtgcttgg tgctttgttt 300  
ctggagatat atatatatat attatatata tgtatatata ccatatgtat atatacatat 360  
gtatgtgtgt atgtgtgtat atatatctct ctaggttgta tgtaattcaa tatgttggaa 420  
tttaaagatg cattattatt tggatttgat gtgaaattag attgtgaata atggagattg 480  
ctctccattt ttgtctgttc tagcatagcc aaaaatataa agatatagat gtacatatac 540  
atatgtattt gattaaacac tttaaatttt aaatggccgc atcaaatttt aaatggtaga 600  
tgatatcaac aattgcagtg cactcaaat gttataaaat cttttagca caaatcctga 660  
agtatatgca aactaaatag catatttata taaaatacct agataacatg tctaggttga 720  
gatatttaat cctcataga gctatatttg actaataaaa aacgacagct aaaaataatt 780  
tcccttccta taagtncaaa tatgatttta aagcatcatt gnaacttgc atgaactatt 840  
aata 844

<210> 351

<211> 672

<212> DNA

<213> Homo sapiens

<400> 351

```

cttctgatg gctcctggat gtcaggaagc accacgccat ttccagcttc tcaggctcat 60
ggcttaaaag gacccagcc aactgttctt cccaagcaag cagacgggat ttatggtggc 120
ggttttcttca aagtgttct tctctacca aatccagaag cgaaacaaaa cagaacactc 180
ctttaccttt tcgaagccag gaaaaggaac tcctcttatt ttttaaaagg cccaagagct 240
gcaagcaaat gtcaacttca tcctgtggtt tgatttacat gtttctttgg gagaaagaga 300
caaaatacag cattgaactt aaaaaaaaaa acttacaatg aactgttata actcagaaca 360
tgatgcacaa acccagattt aacaaacgga gcaaaaaaaaaa aaaaagttct tctgagaggc 420
tcctcgtgtg aggctgtgcc tgtctggcga atcatcttgg aaatggatga ggttaaacca 480
agggtcattg agtcccagca ctgggattgt tnnncctgc tctgaaaaaa tggaaaagct 540
acgtccataa gaggcattga tgtctctaga acctgggcca aatatacaac cgcttttttc 600
gagtgcgatt ttcctaatt gnaatattgt gcatgatcat gaatggaaaa ttttgggaaa 660
tgganaaaag tn 672

```

<210> 352

<211> 865

<212> DNA

<213> Homo sapiens

<400> 352

```

gtcgtggctc gtccattct cggcggtggt acctgctccc ggtggccctg aggacgtgtg 60
ggccaggggc ggccccgaaa ttaggaagcg gagggggagc agtctgcagg tctgcggggc 120
taagtgtcgc ggcggcgcac ctgcgtcaa gaatccggag gaggagactg caaggatagg 180
cccaggagta atggagtcca aagaggaact agcggcaaac aatctcaacg gggaaaatgc 240
ccaacaagaa aacgaaggag gggagcaggc cccacgcag aatgaagaag aatcccgcga 300
tttgggaggg ggtgaaggcc agaagcctgg aggaaatata aggcgggggc gagttaggcg 360
acttgccct aattttcgat gggccatacc taataggcat attgagcaca atgaagcgag 420
agatgatgta gaaaggtttg tagggcagat gatggaaatc aagagaaaga ctagggaaca 480

```

gcagatgagg cactatatgc gcttccaaac tcctgaacct gacaaccatt atgacttttg 540  
 cctcatacct tgaatcctaa aagttttcgc tgagggttaat gtgaacactg ctttacaagc 600  
 ttgtatTTTT gtgatttact ttttctgtaa gccttttggt gtttacactt accagtttct 660  
 aatggaaatt agaattctaa ttgaatattg ttttgtctca gcctaaaagt tacngtcagc 720  
 attgcaattc acctatTTTA ggaaaaatac tcttttcata atatgaaatg cataagcatt 780  
 caaaaagcat ctgtattcca tcatttcctt tttcattcca gccttntttt tgaagtttac 840  
 tttcctctnc ggttcctgat taaaa 865

<210> 353

<211> 822

<212> DNA

<213> Homo sapiens

<400> 353

aatctatgcc agctctctgg catctggggt tcctgactga taccagcagt tgaaggaaga 60  
 gagtgcattg cacctgggtg gtaacgacac aatcagcaca actggagaga ggcattaaag 120  
 aaccagggaa ggtagtttga tttttcattg aattctacaa gctaattattg ttccacgtat 180  
 gtagtcttag accaatagct gtaactatca gctgcaatac catgggtgacc agctgttaca 240  
 aaagatTTTT tcctgtttta tctgaaacat actggattta tataatgtata agcgcctcaa 300  
 tggggaatta gagccagatg ttatgatttg tttgctcttt ttcttttata gttatagcaa 360  
 aaatatggat aatttctagt gaatgcataa attaggttgc gtttcttatt ttgcttttaa 420  
 tctctggtag tttttccacc cctgtgacac aatcctaata gacagtgtcc tgtaaattga 480  
 cacaacacaa taaagtcaag ttattattgc tgttactctg gatgatattg aaaacactgc 540  
 catatTTTaa atcaactact ccacgtgttt ttccatccaa tcacactgct gtgattcagg 600  
 gatctttctt ctaaaacgga cacatttgaa cctcangttc atcacaacc tggtagctgt 660  
 tgcttncag aggatgggag aagtgtagtt aatcacacct cttagtttaa tctgaaatct 720  
 tgaccagtt atttaacaaa taaatacctc attgattata tttaaaagta atcccttctt 780  
 gnaaaccaaa tggggacaat gcattccaaa aaanttttta aa 822



<210> 354

<211> 769

<212> DNA

<213> Homo sapiens

<400> 354

```

aaaaccgcgg ttgccggagc ccgaactgag gcggcggcgg gagcccgggt ggcgctctggt   60
cttcgcgtcg gccccgcgga gccagacgct gccccggcg cggggagaag atggtgccta   120
gcggcctcgg gcccgccacg cgcgccacg agtgagccca gcgcgaccgc gggcgctccgc   180
cgagcagctg gcccggctgg gcccggggcg cgcagctgcc cgcggggcg ggggtggagct   240
gatcagaata atgttcagca tcaaccccct ggagaacctg aaggtgtaca tcagcagtcg   300
gcctcccctg gtggtcttca tgatcagcgt aagcgccatg gccatagctt tcctgaccct   360
gggctacttc ttcaaaatca aggagattaa atccccagaa atggcagagg attggaatac   420
ttttctgcta cggttcaatg atttggaact gtgtgtatca gagaatgaaa ccctcaagca   480
tctcaciaac gacaccacia ctccggaaag tacaatgacc agcgggcagg cccgagcttc   540
caccagctcc cccagggccc tggaggactc gggcccgggt aatatctcag tctcaatcac   600
cctaaccctg gaccactga aacccttcgg agggatttcc cgcaacgtca cccatcttgt   660
acttaacat ctttaaggga tcaagattgg acttttcaag gcaaggggaa agccccaccg   720
aaggaggat ttaaaccatt taacnttta accccttggc cntancaag   769

```

<210> 355

<211> 714

<212> DNA

<213> Homo sapiens

<400> 355

```

tcccttctcg tcgtcgccat tttagactgg tgactgtggc cggctgggag taggcggcag   60
tgagtttccc tgggagggca gcgcgcttgg cgcttctccc ctccccccga tctgcctcca   120
gtctcggact tggttgttgc gcgctccggc tccggctgag ctgggagagt tggaggaggt   180

```

ggcggcgggc agaggtgatg tctgggagcc cttccttgac agcccgggcc gagaagagtc 240  
 cctgcgggaa gcatcaccca ggctggcaga tcatggtagc agcagcgggg gtggctggga 300  
 agtgaaacgg agccagcggc tgaggagggg cccagcagc cccgaaggc cctatcagga 360  
 catggagtat gaaagacgtg gtggttgttg tgacaggact ggccgctatg gagccactga 420  
 ccgctcgcag gatgatggtg gggagaaccg cagccgagac cacgactacc gggacatgga 480  
 ctaccgttca taccctcgcg agtatggcag ccaggagggc aagcatgact atgacgactc 540  
 atctgaggag cagagtgcgg aggattccta cgaggcctcc ccgggctccg agactcaacg 600  
 tangcggcgg cggcggcaca ggcttccccg agacggcgac tatcgggacc aggactatcg 660  
 gaccgagcaa ggggaggagg angaggagga ggaggatnaa ggaggagang agaa 714

<210> 356

<211> 722

<212> DNA

<213> Homo sapiens

<400> 356

gcaaaaagcg aggcgacggc ttaaagatgg agaacgaccc ccaggaggcg gagtctgaaa 60  
 tggccctgga tgctgagttc ctggacgtgt acaagaactg caacgggggtg gtcattgatgt 120  
 tcgacattac caagcagtgg accttcaatt acattctccg ggagcttcca aaagtgccca 180  
 cccacgtgcc agtgtgcgtg ctgggaaact accgggacat gggcgagcac cgagtcattc 240  
 tgccggacga cgtgcgtgac ttcattgaca acctggacag acctccaggt tcctcctact 300  
 tccgctatgc tgagtcttcc atgaagaaca gcttcggcct aaagtacctt cataagttct 360  
 tcaatatccc atttttgcag cttcagaggg agacgctgtt gcggcagctg gagacgaacc 420  
 agctggacat ggacgccacg ctggaggagc tgtcggtgca gcaggagacg gaggaccaga 480  
 actacggcat cttcctggag atgatggagg ctgcagccg tggccatgcg tccccactgg 540  
 cggccaacgg gcagagccca tccccgggct ccagtcacc agtggtgcct gcaggcgtg 600  
 tgtccacggg gagcttcagc cccggcacac ccagcccgc ccacagctgn cctnaatgc 660  
 cggcccacca tnccttgccc ccctgtacca cccttagagc cctgcccacaa ctgcgtgccc 720  
 ct 722

<210> 357

<211> 671

<212> DNA

<213> Homo sapiens

<400> 357

```

ggccttcatg tgtttgtggt ggcaaagagg ctggtaggga tcttctgctg acttttttcc 60
ctgcaatagc aattccctcc cgtctccagg cagatctgat ctaggtgggg aagatgggac 120
cacgagtttg agtgcctcta tgctgccttc ctagatttcc aatcaccaca ggtgcatctt 180
cattctatca gtgcacccca ctactcttcc ttcacactcc agtcaaactt tagctgtttg 240
tttgttgctt tgatcctttt tttgtgtgtg ggtagacaa gcaccaggta tccctactca 300
gccatcttgc tgatgttact cctttattgc ttttcttttc ttttcttttc tttttttttt 360
tttgagatgg agtcgcgccc tgttgcccag gctggagtgc aatgggtgtga tctcagatca 420
ctgcaacctc cacctccttg gttcaagcga ccaagtagcc tcagcctccc aagtagctgg 480
gactacaggc acccaccacc acacccaact aatttttgta ttttggttag agacgggagc 540
tcaccatgtt ggccaggctg gttttgaact cctgacctca agtgatccgc ctgcctnagc 600
ctnccaaagt gctgggatta taggctggag ccaactgtgcc caactncttt attgctttta 660
atctctgcat a 671

```

<210> 358

<211> 796

<212> DNA

<213> Homo sapiens

<400> 358

```

gtttccatcc ctctcttgga ggcttttgaa gtcaccggga gacagatgtg ctctgtggca 60
ggcaggggag tgggggtgct caggcacttg ggaggtctgg gagtcctca gtgtgaccgc 120
tgggaccac caggactttt tcctttgtca gaagcctttg gttgctttgc tgctctgcat 180

```

gtgtcactgt ggaggggcaa tagagcaagg ccttacatgg catggtcatt tctcgggccc 240  
 aggaggctta gaggcctgcc cctggcgctc aagtattgaa ccagaacat ggggtggcac 300  
 tgaagcctcc tcaccacatc atgataaata acggggacat tcacagagca ggcactgttt 360  
 cctcagtcca tggctgagta catcacgggt gttttctctc ttattcctcc catcaagcct 420  
 aaaaggaatc tctattggag atactgccat tagtgttcct tttatagggtg aggaactgag 480  
 gcatagaggg tccccagtt gaaccaactg ataaatagta gaacttggat ttttaattcag 540  
 tcttgatgcc agggataagg ctcttacttt ctaccttagg ctatttctag gaaacgcang 600  
 agagtgttga aggggcagag aaagggatcc agttcctttc tgtcccgcat cctagtcctt 660  
 gagaagcaaa gaagaatgtg tggcttcttt tgctttgctt ttgggtgcatt ccacacatct 720  
 tcaggggacc tgggctcttg atcttggcct cttncccttt aactggtaaa tgggaacagg 780  
 tnaaggggta cnagta 796

<210> 359

<211> 797

<212> DNA

<213> Homo sapiens

<400> 359

acagtgaatc agtgaccccc aaccacgggt cccctctaga agactattcc ctccatatca 60  
 ttgaccttca caccggccgc ttatgtgata cagcacggt caagtgtgac aaggtggctt 120  
 tgtcacacaa ccaagggtg tacttgtaaa aaaacatcct ggccatcttg tctgtgcaac 180  
 aacagaccat ccatgtcttc caggtgactc ctgaaggcac tttcattgat gtgcggacca 240  
 ttggccgctt ttgctatgag gatgacctgc tcaactgtgc agctgttttc cctgaggtag 300  
 agcgggacag tcagacaggc atggccaatc cctttaggga tcctttcatc aattccctca 360  
 aacaccggtt gctggtatat ttgtggcgcc gggcagaaca ggatggtagt gcaatggcca 420  
 agaggcgctt cttccagtat tttgaccaac tgcggcagct gcgaatgtgg aaaatgcagc 480  
 ttctggatga aaaccacctg tttatcaagt aactagtga ggatgtagta aactgcgag 540  
 tcacagatcc atcacaggca tctttctttg tgggtgtacaa tatggtgacg acagaggtag 600  
 ttgctgtgtt tgagaataca tcagatgagc ttttgagct ctttgagaac ttctgtgacc 660

tttttcgtaa tgctaccctg cacaagtga agttcaattt ccctgctcag cttctagcaa 720  
 caattttgca aggagatcc agcgccngnt caaagaccta ttataaatgc caagttggag 780  
 ggcacacaga gcantac 797

<210> 360

<211> 850

<212> DNA

<213> Homo sapiens

<400> 360

aatacaagtg gatttgtaa atggcttttc cctagatgaa gtaggtcaaa ctcgggcctg 60  
 catctcccta aggaggcaat aatgcctggt agcattacca gagggtaaga cggagaagta 120  
 ctttgagaa attagaaact tccctagtagc ttgttatgaa agctcaaact ctttaaaata 180  
 atggaaatgt cataaatcag gcagattcac ttttgccctga ggatggcttg aaggaggctg 240  
 ctgtgagctc tttagtgtt tgtctgacac aggctacagg caaattttaa ggtgaccaac 300  
 ttagcaagaa acaaggcaat tgaaagatcg gtttcctacc ttgaccagct aatgcctgca 360  
 agagcagacc gaatggctga attccaaccc gattccagga atactgtttg ctgacctgct 420  
 gtcttaagtc agtgcctgta ttctgcaaa agacggcaga gtcagggtgg ggaaatgagc 480  
 aggtgctgct gttggcgggtg ggtctaaaca ccccaccaca catttgtttg catcacttgt 540  
 ccaggactat gattctggca ctattttcct ggatgttata caatgtcaaa ggggaagggtg 600  
 gatggttccc accaagacag aagcaccttc ttatttcaga tgctatcttc ttggtctgct 660  
 gtgctgtgta acaaaaatgt atcaaccca agcagagtta aaggccagag ctgggatgct 720  
 gtggtangct gaaaaacacc ctggaaaaga tatncatggc ctaatcctgg accattgaat 780  
 ggttccttat ntggaaaaaa tgtggggagc ctttgctaata gggattaaat taaggatcct 840  
 gaatcntgac 850

<210> 361

<211> 770

<212> DNA

<213> Homo sapiens

<400> 361

```
tcataatgaa cagtgagaac tctcctactg ggcttctgga atgttgggac cactctggtc 60
caatgctact gtcgtttcct gtctggaaat gagagtagct tcttgaatat tcttcctatt 120
cctacttttg cttcttttaa tctattcaca ccattccatc agaaccacct gagggttttg 180
tccaaaacac agctccgatc ctgtcacgac ctcttgcttt aaagcccatt agtagctttc 240
tgntgctctt gtgatagaaa caaaactccc tgatacagcc tacatgggcc tgcattgtct 300
ggctcccact tccctttttc atttcttacc acactccttg gcctctgcac tagaggctca 360
ctggctgatt gcaggcttga gaactgacca tgtttgtttc tgccagaggc ctttgcactg 420
ctgttttctt ttcctggaat gtgcttcctt cctatattag ttaactccta gtcaccttt 480
aatttattat ttgagacggt ctgatctgt caccaggct ggagagcagt ggcacgatct 540
tgctcactg cagcctcggc ttcctgggct caactgatca tctcccacc tcagcctncc 600
aaagtctga gattacaggc atgagccacc gtgcccggcc agtcaatga attttgtaaa 660
gcaatcatgg tcatgtagct accactcaat taaaaaagta ctggccagggt gtggtgattc 720
acatttgnaa tccaagcact ttgggaactt aggcnnaggg acacttgagg 770
```

<210> 362

<211> 654

<212> DNA

<213> Homo sapiens

<400> 362

```
gcaacctcca cctcccgggc tcaagcaatt ctcatgcccc agcctcctga gtagctggga 60
ttacaggcgc ccaccaccac gcctggctaa ttttttttgt tttgtattgt tttttttttt 120
ttttagtaga gatgagattt caccatgttg gccaggctgg tcttcaactt ctgatcttag 180
ctgatccacc tgcctcagcc tcccaaagtg ctgggattat acgcctgagc caccgcaccc 240
agcctcaaat cataaacttt tttttgtttt ttgagacgaa gtctcactct gttgcccagg 300
ctggagtga gtagacacaat ctgggtcac tgcaagctcc gcctcccagg ttcaagcgat 360
```

tctcctgcct cagcctcccc agtagctggg attacaggtg tgcgccactg cgcctggcta 420  
 attttttgta tttccagtag agatgggggtt tcaccatgtt ggccaggctg gtcttgaatt 480  
 cctgacctca ggcatccac ccacctggc ctcccaaagt gctgggatta cagacatgag 540  
 ccactgtgct cagcctcaaa tcataaactt tttaaaggnt tatccctgac cctctaaatt 600  
 aggttatgtg ccttgnata tgctctttta gcacttatcc taattngat tggg 654

<210> 363

<211> 743

<212> DNA

<213> Homo sapiens

<400> 363

ggaacggggc agtcccctga ggagcggggc tggttgaaac gctaggggcg ggatctggcg 60  
 gagtgaaga accgcggcag gggccaagcc tcctcaacta tgacctcaac cggccaggat 120  
 tccaccacaa ccaggcagcg aagaagtagg cagaaccccc agtcgcccc tcaggactcc 180  
 agtgtcactt cgaagcgaaa tattaataag ggagccgttc cccgctctat ccccaatcta 240  
 gcggaggtaa agaagaaagg caaatgaag aagctcggcc aagcaatgga agaagacct 300  
 atcgtgggac tgcaagggat ggatctgaac cttgaggctg aagcactggc tggcactggc 360  
 ttggtgttg atgagcagtt aatgaattc cattgcctct gggatgacag cttcccggaa 420  
 ggccctgagc ggctccatgc catcaaggag caactgatcc aggaggcct cctagatcgc 480  
 tgcgtgtcct ttcaggcccc gtttgctgaa aaggaagagc tgatgttggt tcacagccta 540  
 gaatatattg atctgatgga aacaaccag tacatgaatg agggagaact ccgtgtccta 600  
 gcagacacct acgactcagt ttatctgcat ccgaactcat actcctgtgc ctgcctggcc 660  
 tcagctctgn cctcagctgg tggatgccgn cctgggggct gagatccgga atggcattgg 720  
 ncatcattgg gccttctgga cat 743

<210> 364

<211> 717

<212> DNA

<213> Homo sapiens

<400> 364

```

aattaaatgg ccacaagtgc ctggtggtcc ctttgttggc ccacacagat ctgcctgcct 60
tgaggagaggt atctggggct gactggtggg tgttcattg cagaaagctt ctgagacaca 120
cagaagtgcg cacagttggg agacgtgata cccgcagtgc tgcagtcctg cttgccttgt 180
tgttgttctc tcaacttcta cattagagac ttagttatga tgagtgtggc cgcccttagg 240
aaggcatgtt atatactcac ttaaattgct cagccccctt ttttaaata ctttgttcag 300
tggttaatgg catagactag agctagactg caagagttt agccttaact ctatcccatg 360
ttagctgtga ccttgggcag gtcgcctaatt ctctctgtgc cttagtgtcc tcaccttcaa 420
attaagataa tacaggcttg ttatgaggat taaatgagtt aatatttata atgcacttaa 480
cacttaaaat gttcttgttc tttgtaattg tttttcaaga tgaagtgtgt aactaataaa 540
gtgagggggg attaacagcg aggactggct tgccaccaac agagcaaatac tttagattca 600
tattcaactc aagcctccca gtttcaacc tgtatacaac tgtccagagt ctgtacatgg 660
angcacgcan ccacgtggcc gaaaggaacc cgctgggcan gacaagcacg tgggccg 717

```

<210> 365

<211> 787

<212> DNA

<213> Homo sapiens

<400> 365

```

cattccctag gaagtgcttt gaagaaaaac ttgaggtata tgaaatgggt aaaaatcaga 60
aactaaacct tttacatgg acatcaaagc tttgccataa gcaattcagc atattcctag 120
aaatgtttct aatccataac ctgagagaat gttgatctcc atagtgtgaa aatgacttgg 180
gccagtttaa cttgctcttt tttttatatt ttcactaatt ccttttgtt tttctctgat 240
aattcttctc tttcctgagc ctcttttagag cagcacttac aggattgcct ctgtaaagcc 300
ttattcctgt ccagaaaaag gtaacccaaa aagtctctag tatccactaa aaggtaaccc 360
aaaaatctct agtatccact ggctttctcc agtgtggaag ctttcccctc cacctcccat 420

```



agatcactgg aaaggacccg aggcctcggt tctaatecct ggcttatac taactgctgt 480  
gtggctttgg cttgtccctt agtctctgtg agactgctgc accctcatct gtcaaagatg 540  
gaactgaact tagttgagct ctgagggtccc tgtggacttg gcccctccac accctcatta 600  
tggcaactgg acataaactt aacagaggac tccccagcaa aatgtcctct tcttcctaca 660  
aacaggctgn ttctatatgt gcatgtttca tgctaagcac ttctttcttg ggtggagatg 720  
gcaaangcct ctttctgctg agacaaagtg atttgganag cacctggccc ctgaangggg 780  
agtggta 787

<210> 366

<211> 832

<212> DNA

<213> Homo sapiens

<400> 366

atgttacatg ttcggaaaaa ctttcagttg ctcaagggca ataagaaaat ttgaggccgg 60  
gtgtggtggc tcacgcctgt aatcccagca ctttgggagg ctgaggtggg cgaattgctt 120  
gagcccagga gttagagacc agccggggca acatggcaaa accctgtctc tactaaaaat 180  
acaaaaatta gctgggtgtg gtggtgcatg cctgtagtcc cagctactcg ggaggctgag 240  
gtgggaggat cccgtgagcc tgggaggtgg agtttgcagt gagctaagat cgtgccactg 300  
cactccggcc tgggtgatgg agcaagacct cgtctcagaa aattggaaac tattgactaa 360  
gagaagtttc taggtttgca ctgaattgtc ttttgtacat acagtgaatt gttttgctgt 420  
tctccccact ccatattaat gcaggagcca ggttggctctg ttaggatgaa caaagggtga 480  
ggggagggca ggattcgtgc atctgggggc caaacacatg ttccgtcttg attgccttaa 540  
gagttactag cgaggctcagt gttaggcttg caatagggat tttaaatac actaactagt 600  
tccttagcta ccttcacata cattctatag gccttcttaa attagcacta acctccactt 660  
ccttctctgc cccattgcct tccaaatatg ctatggagct atttttggta ccacgttata 720  
acgtgaatat ttatacagta gcctcttcan gctttgtaat ttcatcca aaaatgcccc 780  
ggtgtgatgc tttaactct acaaagtatg ggttaaangc ncaaggctcat gg 832

<210> 367

<211> 652

<212> DNA

<213> Homo sapiens

<400> 367

```

atccccagca agcaccaggg cccgtgtgac caggccccgt ccccatgcct cggggtgcag   60
tgtgcatttg gggcgacgtg tgctgtgaag aacgggcagg cagcgtgtga atgcctgcag  120
gcgtgctcga gcctctacga tcctgtgtgc ggcagcgacg gcgtcacata cggcagcgcg  180
tgcgagctgg aggccacggc ctgtaccctc gggcgggaga tccaggtggc gcgcaaagga  240
ccctgtgacc gctgcgggca gtgccgcttt ggagccctgt gcgaggccga gaccgggcgc  300
tgctgttgcc cctctgaatg cgtggctttg gcccagcccg tgtgtggctc cgacgggcac  360
acgtacccca gcgagtgcac gctgcacgtg cacgcctgca cacaccagat cagcctgcac  420
gtggcctcag ctggaccctg tgagacctgt ggagatgctg tgtgtgcttt tggggctgtg  480
tgctccgcag ggcagtgtgt gtgtccccgg tgtgagcacc ccccgcccgg ccccggtgtg  540
ggcagcgacg gtgtcaccta cggcagtgcc tgcgagctac gggaagccgc tgcttcagca  600
gacacagatc gaggaggccc ggcagggccg tgcgagcang ccgantgcgg nt          652

```

<210> 368

<211> 859

<212> DNA

<213> Homo sapiens

<400> 368

```

aggtatatca tcctaagatc ttcgtcagct ctgacaaaca tcctaggaac ccactctaac   60
tctcattttt ttcatgcctc ctccagtgtc cttcactcat gctgtttccc cttcttctct  120
tggttcagca ctctggacat taatgtgaag gccccagccc tgatgacaaa ggcagtgggtg  180
ccagaaatgg agaaacgagg gtacagagag tgagagagag cctgggtgag aggggacacc  240
acacgggctg agggcactgg tccacaatgg gaagatgggtc agctctcttc tttttccaga  300

```

ggcggctcag tggatgatgt gtcttccata gcagccttca gtccatctcc tgtaagaacc 360  
 cttttgtcta cctcttccat cccaccctcc actccacatc tttccacccc tectattacc 420  
 caaggaagtt tgtgtccctt tgtagaatca caccaccaag tccctgccc aaaaatagat 480  
 gccttgccct cacaaccac aacctagggg aggttttagcc acaagacagt tccctaactc 540  
 tgcccctccc ttacaggaga tccctattga gcactgccct ctatgtctag ttattagaac 600  
 caagaatgac ctggaaacta tgagtctaac acattctctt ctttctccag ggcttcagtc 660  
 cttacaatgt cagtaaaaca gccttgctgg gcctgaccaa gaccctggcc atagagctgg 720  
 cccaaggaa cattaggggtg aactgcctac acctggactt atcaagacta gcttancngg 780  
 atgggtgaaga aaggagcctt tgcatttgac tgggaccctt tgaaggcat tcattctttt 840  
 ggacaaggga agcccacta 859

<210> 369

<211> 709

<212> DNA

<213> Homo sapiens

<400> 369

acttccgctg tcccgcgaag ggcgggggga gcgaactgtt gtggtgcgga gcgttcggcg 60  
 ggcggcgccc gggcgggcca ggggctgccg cgggactcgg ggcgcagccg agtggctgca 120  
 ggggtggagt gggccggacg agccgcgggg cccgggtgcc gcgggttcga ggccgggccc 180  
 cgcgcgagga ggccgcgcca cccgggggga gctgcccggc agcgagtttg ccccgctgcc 240  
 gaaagaaggc gggagccggc aggggccttc gaaacccctt ggcaaccag gcccgagtc 300  
 cttggggagc ggctgtttcc tgggacccc tcccggacac ccccgctgca gggttacggt 360  
 tctgggcccc cggcagaagg ctctccggg tgacccccgg cggggccctg cgagccgcgg 420  
 gagccgaccc cggggcctcg agccgggagg aagggggctt ccggaggcgg agggccgggg 480  
 gccgaggag cgggcctct cggacgcggg gcagggcagc gcccgggctg gagacggact 540  
 ctgggacct cggctgcggg ggtctcagc acctgcccgc ggcaagcgc gccgcggagt 600  
 ggctaccggg gacccttccc caganggacc ggcccggggc cggggagatg aacggnntca 660  
 agcaccggaa ggangacaag cccgcgaaag ggccccccgg cgccccaa 709

<210> 370

<211> 792

<212> DNA

<213> Homo sapiens

<400> 370

```

aatggagtgg ttatctttgg aaaataaact gtaacacttg gagcaacagt cctgagtgga    60
gaaggtgagc cccgggacct gccaggagac tgtgtcttga ctatcccat cagagatgca    120
ttttctgcta tgtcacatcc catccgttag aatcttccgg atactatata tcatagttag    180
tggtctcttg aattcagcaa ttcatatct aaagagattc ttgaagacac catgttgtac    240
accttaaata tatatacaat ttttatttgt taattaaaaa ataaataagt gaggccagag    300
tgctgggatt gcaggcgtga gccaccatgc ctggccgatt tttatttta acgttttggt    360
ttatcttact gtttttcctt aggtgagaaa aatgtaccct tccatgcctg tgctttctag    420
atittgggac tgatacagat ccacagaggc cacacctaaa attaaattat cgtagtgct    480
aaaacttaat tgactgtgta tataactgtg caattgctgt tactgatata actgtttggg    540
gttcattcaa cagattaaag aagcaaggtc ttgcatttaa cacacaaact aatgagatac    600
tgctttatac aagaatttta aaaacactgt catatggttt aagtgttaagt taatgtcatg    660
cttatgtcat ataacatagc atgttagagt tctctagagg gacagaacta acaggatata    720
tgtacataag aaaggaggtt gattggcccg gtgtggcggc ttatgcctgt aatnccanca    780
ctttgggang cc                                                                792

```

<210> 371

<211> 827

<212> DNA

<213> Homo sapiens

<400> 371

```

tagcactgat tttttaaaac tatggtgact gtattcatat tagacaaagt agaaattaga    60

```

acaaagaata ttaccaggga taaatagagt tgtttcataa tgataaagtg gtgaactcat 120  
 caagaataaa tgatcttaaa tgtttatgca cctagtaaaa taatttcagt atacatggga 180  
 agaaatagac aaattcacia ttgtggtcag atttcagcac ccttccttca atagataata 240  
 gatcaagtag ttggaaaacc aagaaggcta tagaagactt gaacagtgtc atcaaccaca 300  
 ttgacttaat tggcgtttat agaacgctac tcaacagcaa actgcacact tttccaagc 360  
 atagccagaa catTTTTTcaa gatagaccat attctgggtg ggaaaataag tcaattaatt 420  
 ctgaaggatt taaatcatac aaagagtgtt cactgaccat aatggaatta aattagaaag 480  
 gaatctggaa aaatatcttg taactgaaca tcacacttcc aaataaccca ggggcacatc 540  
 ctgagacatt aaaaacatct taacaaatTTT aaaagaatag aaaccataca aaatactttc 600  
 tgagactaca gaattaaact aaaagttaat actgaaaaag tgctggaaat tttccaaata 660  
 tttggaaatt aaacagtatg cttctaaata acccatggat caaaggaaaa atctcaagaa 720  
 aaaatggTTa aatTTTTTTT aattTTtaatg gaaaattccg gnttatggaa accntggTgg 780  
 gatcaagctg gaaacagggc ttcaaaaatt gggagcattt ngatgga 827

<210> 372

<211> 894

<212> DNA

<213> Homo sapiens

<400> 372

tttcaaagac ataaactcct gctgcccaca ggaagcaaca atgcaagaac aagatatgcc 60  
 attcttgcga ggagggccag gcatgtacaa ggtagtgaag acgggaccct caggtcacaa 120  
 catcagaagc tgcctaacc ttagaggtat cccaattgga atgttagttc tgggaaacaa 180  
 agtcaaagca gtgggagagg taaccaattc tgaagggaca tgggtgcaac tggatcagaa 240  
 cagcatggta gagttctgtg agagtgatga aggagaggca tggtccttag ctagagacag 300  
 gggcggaac cagtacctcc gacatgaaga tgaacaagct cttctggatc agaattctca 360  
 aactcctcct ccaagccctt tctcagtgc agctTTTaat aaaggggcaa gttgcagtgc 420  
 ccaaggattt gattatggac tcggaaatag caaagttttg actgttttac ccactgcagg 480  
 tgaccaactg agtgccatat tgaattccat tcagtcacga cccaatctcc cagctccttc 540

catctttgat caagctgcaa aacctccctc ttcctagta cacagcccat ttgtgttcgg 600  
 acagccccctt tccttcagc agcctcagct tcagagtgat cgaggaaaca tctcaacatc 660  
 ttctaaacca gcctctacat caggaaaatc agagctgtcc tctaaacaca gcagatcgct 720  
 ttaaacctga tggacgtatg aaccggact actgnttgat cagaagaagc ttaggggcac 780  
 cagaaagttt atctgctagt gaatccctta tcttaaaatc tgatgctgca aaagttgang 840  
 gcagattncc acagtaggtc antattcccc aacattacac cttgcagaca ttg 894

<210> 373

<211> 795

<212> DNA

<213> Homo sapiens

<400> 373

aagaagatga agaaggaaac caggtgaact cagcaaggca gactggctgc ttacttcagc 60  
 actattggaa ttatttcccg ctgttgccaa tggaaatcaa agaaaatgga tgtgacgtct 120  
 gtgcaggtgg acggcagtc gaggggctta tttcacttgc ttctcagtgc aacttgatag 180  
 gagaatccag catcttaaag ttgcatatgt gtagcactaa tgtttctttt taaatagttg 240  
 ggggaaaatg acctagaaaa ccaaattgca gtttggtagc caaaattaac tcttggttta 300  
 tttgtccttt gtgtgtgaaa agtcctacta ttccgtcgt cagacttcct cacagaactg 360  
 ttgactgggt ttggttctta gtactattga gatctttcgc gtcgatecca acggccttag 420  
 cggcggcaga ctggaataac accttacacc tttctggcct gcatttctgt agacttcact 480  
 ctcaaggag gagttttctt ttcttacgtt ttgacttttg cacaccatat gcactaggga 540  
 ttctggaaac ttctagcatg actgcaaagt ggccaagaga ataaagtcct tgatgataaa 600  
 tcacagtata tcccttgagc ctcaccttat tgccagtgt agatttttc tttttaatct 660  
 ctccgttttt gctaacgaaa acttgaaaag cttatttgga agcttaaag ntttatcttt 720  
 tctccatgga ctaaacctct tcaggactct ntcgcacctg gatgtccagc tctngaacac 780  
 cagtcagatg ggcat 795

<210> 374

<211> 725

<212> DNA

<213> Homo sapiens

<400> 374

```

ataaagaagg aaaatttgtg attcactacc ccgaggaaga ccaaagtgtt aactggttat   60
tttcttcctt tgaatgtata ctttcatacc ttcctttaat gagattgaac tcttggccag  120
gcatgggtgtg cagtactttg ggaggagtaa tcccagcact ttgggagggt aaggcaggag  180
gattgcttga gcccaggagt tcaagaccac cttcagcaac aaagtaagac tccatctcta  240
caaagaaaag aaaaaattag gtgggtgtgg tggtagactt gtggttccag atggtgggag  300
gctgagacgg gaggatcact tgattccagg agttaaggc tgcagtgggt tgtgttcgtg  360
gcactgcact ccagcctggg tggcagagca agaccctgtc tcaagaaaaa agaaattgaa  420
ctctcccca aatgatgtg agaatttaac tgtggaggag accagatact cttgggtgat  480
gtgacctgtg atacttctcc tagtagacac tgaatgatga gaagctgggg atcataggaa  540
tagctgtatt tttcaaagt ttgttggtaa cgagtgagga acctgatgca tccagctcca  600
gagtaaggnt tatttgccat ggtaacactg gataagtaca ttggtgcctg natttccaag  660
taatttatca tttctgnatt ttagtaaaca tacatatata cagaaaagtg cacaaataan  720
tggac                                                                    725

```

<210> 375

<211> 747

<212> DNA

<213> Homo sapiens

<400> 375

```

aaaaaaaaaa aaagtttcca tttctttcaa atagagtgtc tgcctgctat atgcaagaag   60
attggttcca gtacaccctg agtataccta aatccacaga tgccagctct tttataaaat  120
ggaatattcg catgtaccta cccacattct cctgtatact ctataaatgt ctagattaat  180
taaaatatct catgcattgt aaaagctgtg tacatagttg tattgtttag ggaatcataa  240

```

gaaaaaaaaat ctatatgtgt tcagtacaga cccaaccatt gcaggcctat ctacatcgta 300  
 tatatcacct ataatgttac agtttcttgt ttcaatactc agattacttt tgtctaataga 360  
 cctgaaagaa tgtgttaaca ccaaccgcaa ttctggttct tctctcttga taaccaagt 420  
 attacgatgg ttatgacaat gatgattgct gtatggtgcc taatgtgatg tgtagagggtg 480  
 actagatgtg tggcatcata gataaacagt gagacctcag gctaacttga atcttgacag 540  
 gacatcaaga ccttcatcta tgttgaaga cccagggttct gattgaagat gttgactctt 600  
 tgcaggaggc taatactaata gtcagcatct gttcagcttg agggctgaag atgttttgtt 660  
 tgaanggtat gtcttcatat ttgcagatat ttagttagaa acattggttt angaagctag 720  
 ntctttttct ttgaatccct aaaaaaa 747

<210> 376

<211> 820

<212> DNA

<213> Homo sapiens

<400> 376

cgctttctgt cagcctctct cctctccct cccccctc ctccctctcg ctccctctct 60  
 cgcacctgag cgtacgcacc tgcccgggccc cggtccctc ctccctctccc ctccctcttt 120  
 ccccgcccgg ccgcccggagc ctcgtggctg cgtcaccgcc gcccccccag acaagatgga 180  
 caccgcggag gaagacatat gtagagtgtg tcggtcagaa ggaacacctg agaaaccgct 240  
 ttatcatcct tgtgtatgta ctggcagtat taagtttctc catcaagaat gcttagttca 300  
 atggctgaaa cacagtcgaa aagaatactg tgaattatgc aagcacagat ttgctttttac 360  
 accaatttat tctccagata tgccttcacg gcttccaatt caagacatat ttgctggact 420  
 ggttacaagt attggcactg caatacgata ttggtttcat tatacacttg tggcctttgc 480  
 atggttggga gttgttctc ttacagcatg ccgcatctac aagtgttgtt ttactggctc 540  
 cgtgagctca ctactgacgc tgccattaga tatgtgtgca acgaaaaatt tgttggcaga 600  
 ttgtttgcag ggttgttttg tggtagctg cacactgtgt gcattcatca gcctggtgtg 660  
 gttgagagag cagatagtcc atggggggagc accaatttgg ttggagcatg ctgcccaccg 720  
 tcaatgctgc gggcatcacc aaaatgaggc ttcagcagga aggaaatggt gcaanaaaat 780



gttgctgctg atcaagcctg ntaaccacc agctganaac

820

<210> 377

<211> 861

<212> DNA

<213> Homo sapiens

<400> 377

ctagcttaac ttcatttaaa gaataaatta atcgttttta aacttatgcc agcagttggt	60
aattcccaga tggcaggtga actctctaaa cattttttta aaacttttca tcaaatagta	120
attccatttt aacccaaaaa tagctttttg ttttctttct taaaacatga ccatgatgca	180
tcgtaaatca aaataaactg aagtatttat taattacagc tgtattgatt tctactctaa	240
actgacttcc tccgaaatct agtatgtttc atgtttcaag aattaatttc ttgatgggtac	300
tctgctgcac tgtaatttag tcatgggtgga ttgagtcacc agatattaag acagtcatga	360
ttgcaaataga cagatggcat ccagtggcfc accattgttt gtacctcttg gtacccattt	420
ctctgaagct acaagtacag ccatgaggca gtggtaactg tcttagttgg agtctcagag	480
ctcatgcttc atttattccc aaggcaaggc actaaaaagc catagttgga gctggagcac	540
ttgccaaact gtatttctgc catttagaag gtgctcagtc cctacatcta aaatttgaag	600
ggaaaggaaa tcttccatat gaatgccact tttcgttatt ttccagacca tcacatctta	660
cttttccttt cattcaaca tgataactta ttgcccaaca cttttcaaga atgtgtttac	720
atgaaagcag agcaagcatg ttaagagacc cagactgcaa ataactttgg acgggttcag	780
tgtaattcaa agtgagtcac cctgcctcan ttaccgaatg acagctctga tgacagaact	840
tggaagagct acccngancg g	861

<210> 378

<211> 887

<212> DNA

<213> Homo sapiens

<400> 378

```

aaaatggacg taagatttta tccacctcca gccagcccg ccgctgcgcc cgacgtcccc 60
tgtctgggac ctctccctg cctggacccc tactattgca acaagtttga cggtgagaac 120
atgtatatga gcatgacaga gccgagccag gactatgtgc cagccagcca gtcctaccct 180
ggccaagcc tggaaagtga agacttcaac attccaccaa ttactcctcc ttcctccca 240
gaccactcgc tgggtgcacct aactgccatg catcctagtc tcccaggaa catagcccc 300
aagccgaata accaaatgcc agtgactgtc tctatagcaa acatggctgt gtcccctcct 360
cctcccctcc agatcagccc gcctcttcac cagcatctca acatgcagca gcaccagccg 420
ctcaccatgc agcagcccct tgggaaccag ctcccctatgc aggtccagtc tgccttacac 480
tcaccacca tgcagcaagg atttactctt caaccgact atcagactat tatcaatcct 540
acatctacag ctgcacaagt tgtcaccag gcaatggagt atgtgcgttc ggggtgcaga 600
aatcctcccc cacaaccggt ggactggaat aacgactact gcagtagtgg gggcatgcag 660
agggacaaag cactgtacct tacttgagaa tctgaacacc tcttctttcc actgaggaat 720
tcaaggaagt ggtttcacca tggattgctt tgtacagtca aggagttct ccattttatt 780
agaaaaatca agntgctaag cacttttaga ccatttgagc tttgggggtc acccacttct 840
gggaagaaat agtcatgctt cttaataat tttttnaanc cttaag 887

```

<210> 379

<211> 862

<212> DNA

<213> Homo sapiens

<400> 379

```

atgtaaattt tccattggtt cttaagcaag tcattaaaat taaatataac tatgaatgga 60
gagtgtttta ttctttcaat tacatagggt ttgtgaagag tcattctttg tctacttata 120
tttaatcaac atgcaatatt ttatgtgcct tattaccatg tgtaagaag gtaatattca 180
cgttacctag ctatttttta cattagccaa aaaaatatgg ttatgtgcaa atattgtgaa 240
gaacatgcat gcaagtagtt tgcttattaa ccaggtttgg tgcagccac acattataa 300
agctaataat tgctagctat taatattata actttagttc aaatattact gatgtctgtt 360

```

cttctaagac tgaatgttaa gattagaatt tagaatttag tacaagtatg tataaatcat 420  
 ttcaacagaa aaaaatgaat gcaaatacagg aaccagctgg aggcagattt gcatgattat 480  
 tttaatgctg tgacaggacg tgaacactca gaaattcgaa ttaggatgct tatttctcat 540  
 atctacaatg agcactgagt ctctcttatg atgtggccag ctatcacctt gtgttatcag 600  
 caaaccttac taatagaaat ttgagagtct aatatcaaac ttactcttcc tatttgnttt 660  
 ctctgagccc tgggttagaa gactgatatg aaataagcat ttttactata ctgagctatc 720  
 cgtatcattt cattattggt gttgcttaga aattctncac aggnitttcaa aagataaatc 780  
 atgccatttg attatcagca ccatttggcc aatcagcacc caaatcaatg gactcttgcc 840  
 tggcagccct nttaaaaaaa tn 862

<210> 380

<211> 581

<212> DNA

<213> Homo sapiens

<400> 380

ggatccacgg ncgcacagct aaacagcaac cccctacccg cttegtctcc ctccgccgct 60  
 atcggggcct aagcgggagc ggctggcacg gcgtcactgg gtgggctggg gcggaagtgg 120  
 aggcgaggag agacggtggc agtcgtccgc ggggccctgg gctctcgcgg cgaggccctg 180  
 gtgggcgcga ggcatngggg agggggagga ggaggagccc gcggcccggg cggcggcggc 240  
 tctcgggttc tccgtagggc cccgcctcgg agcgggcggc ggcgaggag gagactgagg 300  
 agcaggatgg cggncctcgn cctgtacgcc tgcaccaagt gtaccagcg ttatcctttc 360  
 gaggagctct cccagggccca gcagctctgc aaggctccgtg ggctccggga ggcgggcggg 420  
 atgggtgtcc tcggccgtag ccggaggggg ccgggtagcc gctgcactgc agcccccttt 480  
 cgccggcgcc tcagggggtt gggagtctgg agccctcgnc ttcccactcg gggacccctt 540  
 tttctggggg ctngaacatt anctgggaac ggaccctgaa a 581

<210> 381

<211> 673

<212> DNA

<213> Homo sapiens

<400> 381

```
tcttcttagt cactacttcc cacagagtta accattgcc aagattagctt taatcttta 60
aaataacctg agattagctt tgcctgttct gaaaatttac atgcatttaa ttagacgata 120
tgcattatct ggagtttggg agtcttcagt tatttgttat agcaggggag ggtttgttct 180
cattgctgta tattttactg tacaaccgtg ccactcagtt attcatttta ctgatgacag 240
agacttaatt ggttccagtt tgggactctt aggaatagtg ctgctgtgaa catttggcga 300
tgtgtccctt gatgtacata ttttgttatt tctgggtggg atatactgag gaatggatg 360
tgtatgggtc tagggcatat gtaccatcag ctttagtacc agtagatact gccaaacgat 420
tgtccatatt gagcatcttc ttaatgcttt ttttgtggg gtgaagggg cagagtttca 480
ctcttattgc acaggctgga gtgcaatggc acgatttctg ctactgcaa cctccgcctc 540
ctgggttcaa gcaattctcc tgcctcagcc tctgagtag ctgggattac aggcatgtgc 600
caccacacct ggctaatttt atatttttag tagagacagg gttctccat gntgatcang 660
ctggncctga act 673
```

<210> 382

<211> 858

<212> DNA

<213> Homo sapiens

<400> 382

```
attactttcc ttccattgt caataatgac ttctttatgt cttaggctgt attataaatt 60
caaacacagg aatgttattc ttgccttttt ccatcagaat tacctaaagt ttattagac 120
ttcccccta ctgcaaata tgcctggagg ttctggctct taggaagtag cacttagcaa 180
gttctggata agcactccag aatttgggat gagttatcct tgttgtttgt ccagctctat 240
cttgacccc agtgctgcta attagattca tgccttgctc tttaggcat aagttcctct 300
cttggctatt ttctctagta tgctgagaac taggattccc tttcagtgac agagtcctgc 360
```

cctggaaccc caatcaagag cctaaagttt aactactctc tgagatatta gcctgatgcc 420  
 agcagcctgc ctggatctct aaatattacc cattctggga gttgttagtg gtctctgctt 480  
 tcctgcagtg tcaactcctgc ttcctcattg ggccctgctag ccacagctac ttggatgtac 540  
 ccgaacctgt tgccttgccc tacctctgtg ggctggttca gttctgcatt cccattccag 600  
 tgtccactgc cttctcgcta tccctcccat ctgtgcgcca ccaccagctt atccccagcc 660  
 ctgctaacat gacaaactat tgtgcatttg agtggccact atacaatgtg tgaatataac 720  
 cgtgcttgta agcattgact ttaatgtctg ggatgatccg ctagagtcca tggnacccn 780  
 ctgnggtttt tcatcccttt ctttaagtaat cttgggaaat cccttatgaa atctttttct 840  
 aacatttctt tgctgaac 858

<210> 383

<211> 767

<212> DNA

<213> Homo sapiens

<400> 383

gattcctgcg gacccagctg tggcgacgcc aggagacccc aagctgcatc gccgagtgga 60  
 agcaactaga actccagggc tgtgaaagcc acaggtaggg gctgagcgag gcgtggcctc 120  
 aggagcggag gaccccccca ctctccctcg agcgccgcag tccaccgtag cgggtggagc 180  
 ccgccttggt gcgcagttgg aaaacctcgg agccccgctg gatctcctgg ctgccacccg 240  
 cccccccgc cagcctacgg tgcgcccgcg ggcccagctt ctctctgcgc tgctccccgt 300  
 taaattccct ggggagacgg aagaaaaggc aaaggaagtc ggttctccag gggccagaag 360  
 tgttgagcct aattagtctt cagacttctc aatgaggaat cgcttatcag tttcttatct 420  
 gggagagtgt aggatggagg gacagaaggc acccaggatt tgcacggggg ggattcaggg 480  
 agagaggggtg atgagggacg gggtagggcct tccagtcttg gccagtgccc catcttgcac 540  
 acattgttgg ctctctctta gagccgttcg cccccctggg gaggggagac ccatagtac 600  
 ctctcctgac acccgccgac cctgaccagt gttgccgggt tcttcaaagg ccacgctctg 660  
 acttgctggt ctgtgtcacc tgcaccccc agccccaccg tanaagatgc cttctttggt 720  
 gacggcgctg ggtcangcca ggtcctttgg ccccgggatg gcccna 767

<210> 384

<211> 779

<212> DNA

<213> Homo sapiens

<400> 384

```

ataaggtata aggaaggggt ccagtttcaa ttatctgcat atggctagcc agctctccca   60
gcatcattta ctaaatagaa aatcctttcc ccattgcttg tttttgtcag gggtgttgaa  120
gatcagatgg ttttaggtgt gtggtcttat ttctgagttc tctattctgt tccattggtc  180
tatgtgcatg tttttgtacc agtaccatgc tgctttgggt actgtagcct tgtaatatag  240
tttgaagtca ggtaggggtga tgcctccagc tttgttcttt ttgctgagg attgccttgg  300
atattcaggc tcttttttgt tccatatgaa ttttaaata gtttttttcc taattctatg  360
aagaatgtca atagtagttt aatgggaata gcactgaatc tataaattac tttgggcagt  420
atggccattt tcacaatatt gattcttctt atccatgagc atggaatgtt tttccatttg  480
tttgtgtctt ctctgatttc cttgagcagt ggtttgttgt tctcctcaaa aaggtccttt  540
gcttcccttg ttagttttat tccataggtat ttatttctct ttgtagcaat tatgaatgtg  600
agtttattca tgatttggct ctatgcttgc atgctgggtg tgtataggaa tgctagtgat  660
ttttgcacat tgattttata tnccagctt tgctgaagtt gcttatcagc ttaanaactt  720
ttgcactgag acaatggagt tttctaggnc aggatcatgg catctgcaac caagataat  779

```

<210> 385

<211> 715

<212> DNA

<213> Homo sapiens

<400> 385

```

aagtccccta tacccaaata tggtttaggc ttgattgaaa acttagcttg ggcatttttc   60
tttaaacata acgttttgtt tagcaaaagg aaacttgttc ttttttggtt catggttttc  120

```

ttactgaaga ttctactact tatttgaggc taaactgtag ctagtatctt tgagcttttc 180  
 ttgaaggagt ttgaagttca ctattagtga tttgggcttt tggaccatgt ctataagtga 240  
 catgggaccg gctgtcactg acaggaccct tccaggaggagg ctgtgtaaca cccacgggcc 300  
 cctgacagta actctgtgca gtgagtgggt gggggcctct cacagtggct gggaaccagc 360  
 cagagcaggg atgagggagc agactgtctg ggccccaggg cagactgaaa aggatggaga 420  
 gaaacccag gatggggctc tctccttat gtgtttttaa gttgatgttt ggcttggctg 480  
 ggtttccgta ataaaaatcc ttggagtga gggctagtcc tgctggcccc agcagaaagt 540  
 cgaggacttc ctagatgtct gtggtgcaac agggcaggat ggggccgtgt tagcgctccc 600  
 aggagacatt aggaggcaca ggcatgggtg ggtgcatcct tttcctcaac tggatctgaa 660  
 gactncaccc aacccttnaa gaagatggaa atgcagttgc ccagaaaccg nactt 715

<210> 386

<211> 747

<212> DNA

<213> Homo sapiens

<400> 386

ccaggcatta aatatatgat ataatatgca tgtgtgttat ttttgtaagt ggattccttag 60  
 aaaatataat gttctgtttc tggtttttca cttaacagta ttgtaggtac cttctctgcc 120  
 ttaatgcgta caaatctgct ctacccctc cctgcataag cattctgata catgactctt 180  
 gtaattttta tgtagctttc tgttggtaga tctatatatt ttcctttttt ttttttttg 240  
 ttaggaaaat atatttgtat agcgtggggg taagttgcat gttacatact atgtttttga 300  
 acacttacia agtttctaaa agtaaattcc tagaaatgtt atagctcttt ctggggagca 360  
 agcagggatt cagaataatc cccatatttc attttggtcg tttgttttaa tttgttatca 420  
 tacagtgtta tcggcaattg aaatacaaat attgtgtgaa ctttgaagaa aatattttta 480  
 tttgttcatt ccccttagca gagttgctga gtctcattcc taattigagg cctagacttt 540  
 tgggaaaaca cagaggacgt ccacctttta gagaacagtg ataacttacc aatgggggtt 600  
 tgccggttgg gagttattct ggtatgcata atgcatacag gccacttgaa ggtagaaggc 660  
 aactattctt ttttctttgc ttctgggtgn ttttggttgg tngntggttg gctggttgg 720

tgaagatttg ggggaagtta tccagga

747

<210> 387

<211> 812

<212> DNA

<213> Homo sapiens

<400> 387

```

acttaaagta catatatcta ttgataaggc agcaatacaa gaattgaata gatgtgtggc   60
agagagaaga gaagaacagc tcttttagatc tggatgaagat gatgaggtca agaggagtac  120
tccagagaag aatggaaaag aaatgtttgga gcagacatta cagaagggtca ctgagttgga  180
aaatcagctg aaatcttttg agaaaagggtc gagaaaatta aaagaaggga ataaaaaatt  240
aatgaaagaa aatgattttc tgaaatccct cttaaaacag caacaagaag atacagagac  300
cagagaaaaa gagctagaac agataataaa ggggagtaaa gatgtagaaa aagaaaatac  360
tgaacttcaa gtaaaaatca gtgagctgga gacagaagtc acttccctga ggagacaagt  420
ggcagaagct aatgcattga gaaatgaaaa tgaagagctg atcaacccaa tggagaaatc  480
acaccagtca gcagacagag ctaaattccga gatggccacc atgaaagtga gatctggacg  540
atatgattgt aagacaacta tgaccaaggt taaattitaaa gctgcgaaga aaaattgctc  600
tgtgggtcgt caccacactg ttctcaatca ttccatcaag gttatgagca atgtgtttga  660
gaacctcagc aaggacggct gggangatgt gagtgaagc agtgattctt gaagcacaga  720
cctcttcaaa ctttgggaac cattatttgt aggaaccat tcccagaaaa ataaggtcct  780
taccggaagg aatgggaaaa nganccnga aa                                     812
    
```

<210> 388

<211> 890

<212> DNA

<213> Homo sapiens

<400> 388



aggttcgaat ctccgccgct tcgcggttgc ttctcaacgt ccgggccgca tctcggcggc 60  
 ggcgagggct gagcgcgga gctgcctccg agccggagcc ccagccctag gccctgcgcg 120  
 agctgccccg ccctaccccc tccagcgctc tgctgcctcc tcgcccgaact tcggcctgtc 180  
 cctctctcgc gcgctcagtc ctgcctcttc gcccccgca gctatcggca ctcggtctcc 240  
 cgcgccctggc gggctccgcc cgagcctctg ggcccatggc caagcggcgt gcggccgagc 300  
 cggtgacgtt ccacgtgcct tggaagcggc tcctgctttg cgacttcgct gagcagccgc 360  
 cgccaccgcc tctctggatc cggccgcccc gggtcgcgca tgctgggcag ctctcggcg 420  
 tcccagagca gcaccgaaag cgcaaaatcg acgcaggac catggcagag ccctcggctt 480  
 cgcccagcaa gcgccgtgac agcggggaca acagcgcccc gagcggccag gagcgtgagg 540  
 accacggtct ggagacaggc gatccgccgc tgccgccgcc gnccgtactg ccggggccgg 600  
 gggaggagct cccgggcgcc cggctcccgg ggggcggttg cgacgacggg gcggggcgcg 660  
 cangaccccc gcggggagaa ctggggggtc gcatcgtgcc aagcacaatg aagaattttg 720  
 ggcagtatta ataccttnca atacttgga ggaatcctt ttggccttcc taattggatc 780  
 ttgggcaaga catttggaag aatttnaagg tggaagacc accccttgac aggaaagcca 840  
 accactttta aggggcaang ggaaatgnaa agggggcctt gaagggttga 890

<210> 389

<211> 624

<212> DNA

<213> Homo sapiens

<400> 389

agtacttctt gttctcggct aaccctggcg ctgggccggg ggctggagag tgaccgtggt 60  
 ctgagtgacc tgggacggct gcgtgggccg ggggtgggcct caaagccggg caccagacgg 120  
 gaggggcggc gctcgggccg cgcgctgccc gcgccgggtc ctggcgggcg gcgaggcttg 180  
 ggctgactcc tgcctcagga tgccggggga ggaagaggag cgggccttcc tgggtggccc 240  
 cgaggagctg gcgagcgccc tgaggaggga ttccgggcag gcgttttccc tggagcagct 300  
 ccggccgcta ctagccagct ctctgccgct agccgccccg tacctgcagc tggacgccgc 360  
 acgccttgct cgctgcaacg ctcatgggga gccccgaaac tacctcaaca ccctgccac 420

cccttcctgg gatgggccag acaagcagag cctggtcagg cggcttttgg cagtctacgc 480  
actccccagc tggggccggg cagagctggc actgtcactg ctgcaggaga caccaggaa 540  
ctatgagttg ggggatgtgg tanaagctgt gaggcacagn caggaccggg ccttctgcgc 600  
cgcttgcttg cccangagtg tgcc 624

<210> 390

<211> 590

<212> DNA

<213> Homo sapiens

<400> 390

cttcccgctc cagcacgcca cgctgtcagc cttcgccgcg gtctatgtgt cgatgtactt 60  
caactcggtc atctnggaca ccaccaagct gctgaagccc atcctgggtct tcgcctttgc 120  
catcgccgcg ggcgtatgcg ggctcacgca gatcacgcag taccgnagcc accctgtgga 180  
cgtgtatgcc ggcttcctca tcggggcggg catcgctgcc tacctggcct gccacgcggt 240  
gggcaacttc caggccccac ctgcagagaa gcccgcggcc ccggcccccg ccaaggacgc 300  
gctgcggggc ctgacgcagc ggggccacga ctcggtttat cagcagaata agtcggtgag 360  
caccgacgag ctggggcccc cagggcggct ggagggcgcg ccccgggccc tgccccgcaa 420  
gaagaccccg cgcgccgcca catgaccatc cacgtgccgc tggacgcctc gcgctccaag 480  
cagctcatca gcgagtggaa gcagaagagc ctggagggcc gaggnctggg gctgnccgac 540  
gacgccagcc ccgggcacct gcgcgcgccc gncgaaccca tggcggagga 590

<210> 391

<211> 788

<212> DNA

<213> Homo sapiens

<400> 391

aagcgtcatt cagtcattcg atgctgcaat acttcaagag ggcggtgtg ggccatgcac 60

caacccccacc cacgttcacc cgggcccttc cagctccaat ccaggggggtc tggaggatgc 120  
 ctgcaatgtc cccttttaca ctaaagaaaa caagcgccag tcaggtggaa gtggcctcta 180  
 actagtcact ccgctgggca catggtctct gtagtcagag actccccctt gaccttgccc 240  
 ttcacttttag aaatgcatat cacaggctac ttcattcaga ccagaaagga ctccagtgtt 300  
 ttcagttggg agaaaaagcc ctcatcagaa atgggatcat tttcctggcc ccatcagccc 360  
 ttcgaaattt ggcccagctc cctaaagggt tggttcagga aagggtgcag gcacgcctgt 420  
 aacctggccc acacctacaa gcttggggct ccaggctctg aatatctggg gacgtgcagt 480  
 gtcgggtgac ttcttcgtca ccacgtgtg ttccttctcc gagtgccac ctactctgtc 540  
 cagcttaaag gatgaattgc acagatgcaa acatttccca cagaggagag tgaggggcat 600  
 gccaggatca ctgnaagggt ccctgcagcc aggtttctag ggatcaagggt ctctacagga 660  
 ctcttcagc aaaagcagggt cccctcgtgg aatgggtctc tgagtgccct ggtgaatata 720  
 ttctccatgc ctgctttgaa aaaatccctt tggctntctt tggntcatcg ngatgaaacc 780  
 tcttttaa 788

<210> 392

<211> 859

<212> DNA

<213> Homo sapiens

<400> 392

aatcatgtta gattttctga gaggtaaac acctgccatc tacaaattac aaggctggat 60  
 aacagctcac tccatttgaa attcagtga aaccaagag ctaggttctt actgaatttg 120  
 catctcaatt tgggaaactg aacttagctt tcaaagatca taggaagtct ggttggagaa 180  
 actagggatt attctggcaa tgggtgcagg aagggtgtca gaataacca gtcgccattg 240  
 gttttgagaa acggaactat cttatgcaga gcccgaggagg caagtctcag acctatgggt 300  
 tgaagccatg gagaaggaaa ttggatcca atgtaatgaa gcgctttcta agtcagaatt 360  
 tccctgcaat ggtgtggcct gattcaataa aaattaagaa taataaatat aatggaaaaa 420  
 aatctccact gattgagtgt ttacttgggt ccaagcacta tgctaagttg ttcattattt 480  
 tatttaattg ttacagcaat tttagatg catctttcac tattttataa gtggaaaaga 540

gaagtgcgcc caaaaagtta gagctcaaac agcagcttat tctaccagcc cctgctcttg 600  
 cggaggcctc tggaaaagac ctgaatgaca cctattggag aatcacatct acaaggggct 660  
 tcaaacagac caaatagatc atcacctctg tggcccttg gtaactatat gttctgagac 720  
 aaaggaaagc tccctaaggg ttagttaacc ttgctgagg aaatttacat tcatacntag 780  
 agtgaattac tcaggtgtgc cttaggtgtg caaaaaggga aggagancct gaattcacca 840  
 aggttaaate ttgctaaan 859

<210> 393

<211> 614

<212> DNA

<213> Homo sapiens

<400> 393

ccctttcacc tccaattccc gtgatcccaa aagaagagga agactccagg aggggtatag 60  
 attgtgccgt catagcttta caggtggttt taaagtttagc aggggtttgt catggtgatt 120  
 cactactcag ttaccagct caaggattat acagctcttt tccgggaact caccagaggag 180  
 caagcgagac actaccattg aatcaggga tgagaattaa gaatggacag gaccaagaca 240  
 gaactcaaga aagccactgg ggaaaactcg agaagaaagg gtgtatacta gtaggttaga 300  
 tctgtgaacc tgaggacaag aagaccttgg gaaatggagg cctcagggga tgtgcattca 360  
 catactatta cgcttctcaa agagagacca acatcatgct ttaacacat ttgatgaggt 420  
 tttttatttg tgtttttgtt tgttttttg agatggagtc tcactctgtg gccagggctg 480  
 gagtgcagtg gcgcaatctt ggctcactgc aacctccacc tcccagggtc aggtgattct 540  
 cctgtctcgg ncttccaagt agctgggact acaggcatga gccatcacac ccagctggnt 600  
 ttttngttt ttgg 614

<210> 394

<211> 752

<212> DNA

<213> Homo sapiens

<400> 394

```

tcacggtttg gcctcggaga ggtccgaggc aagtacattt cttaaaaggt aataaaatgc 60
attattggaa agttggacag tcaggccacg actcctagcc cacggcgtgc cccacctccc 120
agcagcccct tcagcccctt gcccctgttg ccccaaacct cagggttccc tcttgcata 180
tcatggggga accacagtgc tgatgtgcac ttccccactg tcagctcggc tgcacctcgt 240
gtggcgccag gtcccaaggg cctctgcaga ggccaggctg tgagcccctt gcctgcctgc 300
tcccctgatg aggcaacagc ttctctgaaa tgagctgccg gccaggagca ggcaggcacc 360
agcctgtctt tccttttctg gtaattcctc agcactgagg ctccgttctt gggcacccca 420
ggattgaagg gaacctcaga atcatgtcac tgccattcta gagtttcaat ccaaggggtc 480
ccctttagct catctccaag atgggtaaac gtagccacca ttcagaaagc ccagaaattc 540
ttgttccac atcttagacc cctgagcaac acaaggagaa aatgcagctg cttacctatt 600
aatatctact gagggacaat cagcaaagcc tcaaaggagt cgtctcaggt aggggtactg 660
gcctgtggca ggagagacag aggcacaaac ccaccaccc ataacttccg gtggctgatc 720
ggggcccang gagggaaaca ngtgaaacan ca 752

```

<210> 395

<211> 685

<212> DNA

<213> Homo sapiens

<400> 395

```

cttgatgcca tgtaagaat gatgtgaatt cttcccagtt ctgccctggt gctagacatt 60
gcccatact ttcaattaga cactagctgt atctaaatag tcccactcag taaacttaca 120
tcttgaaaaa caagaccagt aagaggccag tgaaagtact aaagaaagaa accaatgttg 180
tgtgagtttc aaagcagctg caatgctgtg taaaagtaga gtgttcattc tccatttcca 240
agagtgtttc agaataggat gtcttaagac ttcagtcatg tcagagattt ttttttttag 300
gtgattattg agttttctct tctcctttaa gtcatcacct tccttttatg aatgatagt 360
aaggaaactcg tctattctga aaggcatttg agaaatagct gaattcctgg ctgctttttt 420

```

gctgggggta gatggtggaa tacttctggt ctagatataa cttaccacta agaaaccccc 480  
 agtatgtcac cactgcctaa atctaactag accagggtcc aaatgccatc caggccaggc 540  
 aggaaatata cctcatgtga aagacagtaa ggagttgtgg gcagtgtaac aaacaggaga 600  
 gctatgcccc aactaaaagg agcagctgct actgcttant ttcagccagt tgcaacagta 660  
 tgtgggaatg tangctgcat ggntg 685

<210> 396

<211> 812

<212> DNA

<213> Homo sapiens

<400> 396

aaaattctgg ccatttggcc tccttcccc cttcgtccgc tctcattggc tctgctgcag 60  
 ccctgaccaa cgctccaata ggccgggata cagccatact tcaatggatc ccagggggat 120  
 cttgaaggca tttcccaagc ggccagaaaat tcatgctgat gcatcatcaa aagtacttgc 180  
 aaagattcct aggagggaag agggagaaga agcagaagag tggctgagct cccttcgggc 240  
 ccatgttgtg cgcactggca ttggacgagc ccgggcagaa ctctttgaga agcagattgt 300  
 tcagcatggc ggccagctat gccctgccc gggcccagggt gtcactcaca ttgtggtgga 360  
 tgaaggcatg gactatgagc gagccctccg cttctcaga ctaccccagc tgccccggg 420  
 tgctcagctg gtgaagtcag cctggctgag cttgtgcctt caggagagga ggctggtgga 480  
 tgtagctgga ttcagcatct tcatccccag taggtacttg gaccatccac agcccagcaa 540  
 ggccagagcag gatgcttcta ttctcctgg caccatgag gccctgcttc agacagccct 600  
 ttctcctcct cctcctccca ccaggcctgt gtctcctccc caaaaggcaa aagaggcacc 660  
 aaacacccaa gccagccca tctccgatga tgaaccagt atggggaaga aaccaggtt 720  
 agtgcantg atctggaagc cctcatcant ggccactacc caccttcctt gagggaaatt 780  
 gggagcctac ccancctgc tgcctggata aa 812

<210> 397

<211> 815

<212> DNA

<213> Homo sapiens

<400> 397

```

ggaggcaaac aacccatctc tcttggagaa tccacacttc gtttcttcta ggtccagcct   60
aaatgttacc tcctccaggg agcctttcca gatactgctt ctctctcttc ccccaactcc  120
ctcccacaaa tgaagttttc tcttctgaat tccttgctgg tactgtcact tatattcttt  180
tgggtagatc tctgggcatg catatgtcac ctctgtgac tgtgggtttc ttgacaacct  240
aatcaatgca ttgaacaaag gagatgttta gacaacccat ataaaatgaa taagagaaat  300
agggtgaata cagtctaccc caattgcaat cagattagtt tcctttattt tgaaaacgat  360
tagaactagt agaggagtta gatgtggccc actagggaac aaattttcat ctccaagccg  420
tcctctggct cgatcgggtc tgcactgggt ctgcatcaac ttgcgtggc tcagaggggag  480
gctcagcccc agcctggcct tcctggtgcc cactcccaac atcctgagca gggccgactc  540
taggcacccc acgattagct gagtgatcta gggcaaggac ctaggcgtct ctaagtctta  600
gtttcccat ctgaacaatg tggataatga cacgtacctg gggtagggcag gctagagtaa  660
atgggaaaat caaagcgcca gccagagcgg gtcgactgt tagttcctgt atttctcct  720
cctgcctctg gtttcttccg tccgntctag ctgcctgaag acccagcccc acagcgatgc  780
ctgtcaancc cgcgtcgccc accanggcag ctgct                                815

```

<210> 398

<211> 840

<212> DNA

<213> Homo sapiens

<400> 398

```

ttgttgtgtg tgttttgaga cagggtctca ctttgtcacc caggctggag tatagtggca   60
caaacatggc tcaactgcagc ctgcacctcc tgggtcgaag cagtcctcct gcttcagccc  120
cacaagtagc tgggactaca ggcacacacc accacgcccc cctctacaaa aaattgtaaa  180
aatgagccag gcatgtggtg gtgtatgcct acgacctag ctactcagga ggctgaagtg  240

```

ggagaat ttt ttgagcccag gaggtggagg ctgcagtggg ccataatggc aacactgcgc 300  
 tccagcctgg cagacagagg gaagatatgt ttgacatagt ttagatat ttt gtccccaccc 360  
 aaatccatgt tgaaatgtaa tccccaatgt tggaggtggg gcctagtggg aggtgtttgt 420  
 catgggggcg gatccctcat ggcttgggtgc tgtccttgtg atagttagtt cacttcatgt 480  
 gagatctggg taaagtgtgt ggcaccttcg cctaccccca cttgttccca ccaagtgaga 540  
 ttctgtctcc tgcttaccct tctgccatgt ttcttgaggc ctccagaagc caagcagatg 600  
 ccagctccat gctccctgta cagcctacag aagcatgagc cagttaaacc tctcttcttt 660  
 ataaattacc caagtcctga gtatttcttt atagcaatgc gagaacggnc tacacaaggn 720  
 tctagtaggg agaaactagc angtaaattg atcccagaca gcactcttac atttttaatt 780  
 acaggtccct ttgagtagac caaactttta gaatagggga aatcattacc tatnaattgn 840

<210> 399

<211> 830

<212> DNA

<213> Homo sapiens

<400> 399

gacagagatt gaactcagct atgcaaagca actcaggaat ctttcaaaga agtaccaacc 60  
 taaaaagaac tcgaaggagg aagaagaata caagtatacg tcatgtaaag ctttcatttc 120  
 caacctgaac gaaatgaatg attacgcagg gcagcatgaa gttatctccg agaacatggc 180  
 atcacagatc attgtggact tggcacgcta tggttcaggaa ctgaaacagg agaggaaatc 240  
 aaactttcac gatggccgta aagcacagca gcacatcgag acttgctgga agcagcttga 300  
 atctagtaaa aggcgatttg aacgcgattg caaagaggcg gacagggcgc agcagtactt 360  
 tgagaaaatg gacgctgaca tcaatgtcac aaaagcggat gttgaaaagg cccgacaaca 420  
 agtcaaata cgtcaccaaa tggcagagga cagcaaagca gattactcat ccattctcca 480  
 gaaattcaac catgagcagc atgaatatta ccatactcac atccccaaca tcttccagaa 540  
 aatacaagag atggaggaaa ggaggattgt gagaatggga gagtccatga agacatatgc 600  
 agaggttgat cggcaggatga tccaatcat tgggaagtgc ctggatggaa tagtaaaagc 660  
 agccgaatca attgatcaga aaaatgattc acagctggta atagaagctt ataaatcagg 720



gttttgagcc ttctggagac attgaatttg aggattacac tcagccaatg aagccactgn 780  
gtcanataca gcctttcaaa ttctngaggag aagcaaccag acttaaattg 830

<210> 400

<211> 850

<212> DNA

<213> Homo sapiens

<400> 400

taaagaactg cataggtgat ttcctaaaaa ctttggaaga cccagatttg aatgtgagaa 60  
gagtagcctt ggtcacattt aattcagcag cacataacaa gccatcatta ataagggatc 120  
tattggatac tgttcttcca catctttaca atgaaacaaa agttagaaag gagcttataa 180  
gagaggtaga aatgggtcca tttaaacata cggttgatga tggctctggat attagaaagg 240  
cagcatttga gtgtatgtac acacttctag acagttgtct tgatagactt gatatctttg 300  
aatttctaaa tcatgttgaa gatggtttga aggaccatta tgatattaag atgctgacat 360  
ttttaatggt ggtgagactg tctacccttt gtccaagtgc agtactgcag aggttggacc 420  
gacttggtga gccattacgt acaacatgta caactaaggt aaaggcaaac tcagtaaagc 480  
aggagtttga aaaacaagat gaattaaagc gatctgccat gagagcagta gcagcactgc 540  
taaccattcc agaagcagag aagagtcac tgatgagtga attccagtca cagatcagtt 600  
ctaaccctga gctggcggct atctttgaaa gtatccagaa agattcatca tctactaact 660  
tggaatcaat ggacactagt tagatgtttg gtcacatgg ggaccattac atatgacat 720  
acaatgcact gaattgacag gttaatcata agacatggaa agagaagtgt ctaaaagctt 780  
caaaatggtc actttttttc cttctggaga ctgttggttg gctttcttca ttgtggtttg 840  
nacattaatt 850

<210> 401

<211> 730

<212> DNA

<213> Homo sapiens

<400> 401

tactggccat tgctgcctgg ctacccgggg aggaggaggc gcaggagtga gctgcccagag	60
accgcagggc aagtaagcgg ctgacggcgg aaagaccctg gggaaggggc tttgcggccg	120
gctagaaaca ttttcccaa gcggctccgc aaaatgacca gcctgttccg ccggagcagc	180
agcggcagcg gcgggggtgg caccgccggg gcacgcgggg gcgggggagg cacggccgcc	240
ccccaggagc tcaacaacag ccggcctgcc cgccagggtc gccgcctgga gctcaaccag	300
gccatggacg acttcaagac catgttcccc aacatggatt acgacatcat cgaatgcgtg	360
ctgcgcgcca acagcggcgc tgtggacgcc accatcgacc agctgctgca gatgaacctg	420
gagggcgggtg gcagcagcgg cggcgtctat gaggacagct ccgactcgga ggacagcatc	480
ccccgggaga tcttgaaag gactttggaa cctgatagct cggatgaaga gccccacct	540
gtgtactccc cgccagccta ccacatgcac gtgttcgacc ggccctaccc tctggctccc	600
ccgactccgc ctccccgtat cgacgcgctg ggctctggag ccctacaag ccagagacgc	660
tatcggaact ggaaccaccc actggntggg caaccttncg gatgactttc ttccgcatnc	720
tggcccagca	730

<210> 402

<211> 795

<212> DNA

<213> Homo sapiens

<400> 402

ggacaatgtt gaatgaatgt ctggctcagt gatggagagc caggttcatc tttgaaatct	60
agggtctttc actcatgaag cagactccta gtcctggagt gactgtgtac gagagcgtgg	120
ttgtggtgct gtatgtgaac gcatgcaagc ttgattcacc ttcagggggc tgataacct	180
gtaaatcatc aaaatgagat cataagtgtt aatgtacact ggacatgaaa acaaagactg	240
gtttagcagc agacattggt ttactctgca gcctgtgttt tctgtttccc cttttccac	300
ctccttcccc ccaccaatc cttttttttt ttcttttttg cttttctttt cttttttttt	360
agtttttatt tactttacct agtatgcctt tttttagttg cttctcaagt cagaaaactt	420

ttcaggaagg tttccctgtg catttgcacc agatgaatgt ttgatgctat gaaaagcttt 480  
 ccataatcatc aaaactaatt tgtgtagatt tttgcatgaa aaaaatcata aatttccctc 540  
 aaaatagact gtgttgcagt acacaagttg ccataatagt ataaaacagt aaaatgtgct 600  
 taaaaggcca cccttttcat tttcagagat aacataaaga tctttgcatg aggtaaatct 660  
 acagcatagt tcatttttag attttgttga gtcctgtaaa gaagaagaag aaaaaagttt 720  
 cagttgnggt anaataccgt gctgngtita aatggtactt ggtttcaaac tttggtttct 780  
 atgaaaatga tatgg 795

<210> 403

<211> 853

<212> DNA

<213> Homo sapiens

<400> 403

actttttgct tcaaaggaca ctagcaataa agcgaaaagg caattaaaag agctggaaaa 60  
 atatttgtaa accatatatc aggtaacagt ctagtattca gaatagataa ggaactctta 120  
 aaactgacca ataaaaagat aaaccattta aaaaatgaac aaaaaattta atagacattt 180  
 gccttagtct gttggaactg ctattacaaa ctacataga ctaggtagct tgtagtaaca 240  
 gatttatttc tcacagttct ggagactggg aattcctata tcaaagtgcc agcagatttg 300  
 gtgtctggtg agggccttct tccaggttca cagatagtgt ctactaagt tctcacatga 360  
 tagaagaagt aggggtgcta tccagagtct cttttataac agcactaatt ccattcataa 420  
 ggactctgcc ctcatggcct tatcacctac caaagtgcc acttcctaatt gccagcacat 480  
 tggagattag tatttcaaca tatgaatfff gggggatata tattcaatcc atagcctgcc 540  
 accccttgcc tcccaaaatt tatgtttttc tcacaagcaa aagacattgc atcccaacag 600  
 tctcaaaat cttgattcat tccagcatca acctaaaatt taaaaccac agtctcacct 660  
 aaatatcatc taaatcagat atgggtgaga ctcaagatat gattcatctt gaggcaaatt 720  
 gtccctagct gtgacactgt gaaaccaaatt aagccatatg cttncaaaat acagtgggtg 780  
 gacagggata gaatagcata tccattncaa aaggggagaaa tacaagaag aaaaggtanc 840  
 aaatccctgt agt 853

<210> 404

<211> 864

<212> DNA

<213> Homo sapiens

<400> 404

```

tttgcgctcg gggaattaaa agaggggaaa aaaagcccga agaaaactca cgccccaac   60
aaaacgcaag gagaggaggg cgcgcggcct gcagccctcg cccgcgtccc cggccgcggc  120
gtgatgcgcg cggaccagcc cgcgacgccc gggctgccgc tgtccccgca cctggacgct  180
ggcgcggttg ccgcgcccc aacctgatcg ctgccgcgg cgactcggcc ccaggcttcc  240
ggcgccggtg ggggccctcg ctctccatgg ggctgaggga ctggctgaga accgtgtgct  300
gctgctgccg gtgcgagtgc ttggaggagc gcgccctgcc tgagaaggag cccctcgtca  360
gtgataacaa tccatattcc tcatttggag caactctggt gagggatgat gagaagaatt  420
tatggagtat gccccatgat gtgtcccaca cagaggcaga cgacgacaga accctgtaca  480
atttgatagt cattcgtaat cagcaggcca aagactcaga ggagtggcag aagctcaact  540
atgatatcca taccctgcgg caggttcgaa gggaagtaag aaacagatgg aagtgcattc  600
tagaagattt aggttttcaa aaggaagctg actctttgnt gtcaagtac taaactcagc  660
accatcagtg attcttaaaa cacaaggaaa gctcgagaga tgtttgntaa aactggcttg  720
aagaaaccag tattttccca acaaagttgg gaagcttctc agagagatat ctctttgttg  780
nggaccgtct tattgcactt gatgctcaga agagtcttta agcttgttgt cgaacttccc  840
caanaagctg gggttcatgc tgnat                                     864

```

<210> 405

<211> 830

<212> DNA

<213> Homo sapiens

<400> 405

atgtatgata tgttgggtga cacaccatgg gtaaggatt gcttgacat aatttgctct 60  
 gcatattatg gaccattgtg gtttcttcca gtcacttaga tggaaaggag gttaaaccata 120  
 ggtacttttt agcaaggata taaagtcaaa ttcagcatat gtttttattt ttaggcttga 180  
 cttttacaag acattaatct ccatttgtac atatgttatt ttatttgtaa aaccaaatat 240  
 gactcaacac ctttttgatg agtagtgact taactaagat ttacaagtaa tatttagaca 300  
 gattcagtca gacaccactt agccattttt acattccctc tggtagatt tggtagata 360  
 taattaagac tttaatctga aatttaaagt agttttaatt ctgaagaagt tacatcctct 420  
 gtattattta catgcaacaa aataaaagt gattaatata gtaatgcat ggtaacaata 480  
 gagctatgtc ttatgcatga aggcaacttt ggatgtttta acacatttga ctgactttgg 540  
 tttagtgaat gctgacaatg ctgctctact taggtttcct atgaaatttt taagaatggc 600  
 tatgagactg tatagaagct tctagagaac tgaaagtcac aatgcagagt tgccttttct 660  
 agtgcagcta agtggcggcc tcaactgaag atatgagttt ctttgggttc ttggagttat 720  
 caaatggatc ttgcattatg ttactttgca aatactgaag taatgatctt acctaatacc 780  
 acacctgtna cattgctcac attatanagt atttctcac taattaaata 830

<210> 406

<211> 848

<212> DNA

<213> Homo sapiens

<400> 406

gtagttggga acagcgggaac gctgggtccg gggactgagt aaggtgtctg gatcggaggg 60  
 aggttcgggt gggcatcggg cggctggaag agctcgactc gtcccgtgg gaaagcgcga 120  
 gtctgagtgg aaccctggac gacttgcaga gcggctggcg cagtcatggc ggactactgg 180  
 aagtcacagc caaagaaatt ctgtgattac tgcaagtgtt ggatagcaga caataggcct 240  
 agtgttgaat ttcatgaaag aggaaagaat cataaggaaa atgtggcaaa aaggatcagt 300  
 gagattaaac agaaaagcct ggataaggca aaggaagaag aaaaggcatc aaaggagttt 360  
 gctgcaatgg aggcagctgc cctgaaagca taccaagagg atttgaaaag acttggctta 420  
 gagtcagaaa ttttggagcc aagcataaca ccagtaacca gcactatccc acctacctcg 480

acatcaaadc aacagaaaaga aaagaaaagaa aagaagaaaa gaaaaaaaaga tccttcaaag 540  
 ggcagatggg tagaaggcat aacctctgag gggtaccatt actattatga tcttatctca 600  
 ggagcatctc agtgggagaa acctgaagga tttcaaggag acttaaaaaa gacagcagtg 660  
 aagaccgttt gggtagaagg tttaagtga gatggtttta cctattacta taatacagaa 720  
 acaggagaat ccagatggga gaacctgatg atttcattcc acacactatg atctgncttc 780  
 tataaggtca atgaaaatcc ttgcacccta atgaatccaa tcatcagatt ccatagngat 840  
 ctgatggg 848

<210> 407

<211> 846

<212> DNA

<213> Homo sapiens

<400> 407

ctgccgcggc tttgcgggga cgggggagtg gtagtggggg ctgcagctgc cggaccaggg 60  
 cgcgatggct acgggcgcgg atgtacggga cattctagaa ctcggggggtc cagaagggga 120  
 tgcagcctct gggaccatca gcaagaagga cattatcaac ccggacaaga aaaaatccaa 180  
 gaagtcctct gagacactga ctttcaagag gcccgagggc atgcaccggg aagtctatgc 240  
 cttgctctac tctgacaaga aggatgcacc cccactgcta cccagtga ca ctggccaggg 300  
 ataccgtaca gtgaaggcca agttgggctc caagaagggtg cggccttgga agtggatgcc 360  
 attcaccaac ccggcccgcga aggacggagc aatgtttctc cactggcgac gtgcagcgga 420  
 ggagggcaag gactaccctt ttgccaggtt caataagact gtgcaggtgc ctgtgtactc 480  
 ggagcaggag taccagcttt atctccacga tgatgcttgg actaaggcag aaactgacca 540  
 cctctttgac ctcagccgcc gctttgacct gcgttttgtt gttatccatg accggtatga 600  
 ccaccagcag ttcaagaagc gttctgtgga agacctgaag gagcggtact accacatctg 660  
 tgctaagctt gccaacgtgc ggctgtgcca ggcacagacc ttaagatacc agtatttgat 720  
 gctgggcacg aacgacggcg gaaggaacag cttgacgtct ntacaaccgg accccaaanc 780  
 aagtggcaaa aggaggagta cctgctacag gacttcncaa gaatgaggcc cgaaaaagga 840  
 acggga 846

<210> 408

<211> 838

<212> DNA

<213> Homo sapiens

<400> 408

```

gtgccgtccg cccgtccgtc tgcccgcagg cattgcccaa gccagccgag ccgccagagc   60
cgcggggccgc gggggtgtcg cgggcccac cccaggatgc tcccctgcgc ctccctgccta  120
cccgggtctc tactgtcttg ggcgctgcta ctgttgctct tgggatcagc ttctcctcag  180
gattctgaag agcccgacag ctacacggaa tgcacagatg gctatgagtg ggacccagac  240
agccagcact gccgggatgt caacgagtgt ctgaccatcc ctgaggcctg caagggggaa  300
atgaagtgca tcaaccacta cgggggctac ttgtgcctgc cccgctccgc tgccgtcatc  360
aacgacctac acggcgaggg actcccgcc ccagtgctc ccgctcaaca ccccaacccc  420
tgcccaccag gctatgagcc cgacgatcag gacagctgtg tggatgtgga cgagtgtgcc  480
caggccctgc acgactgtcg cccagccag gactgccata acttgccctg ctccctatcag  540
tgcacctgcc ctgatggtta ccgcaagatc gggcccgagt gtgtggacat agacgagtgc  600
cgctaccgct actgccagca ccgctgcgtg aacctgcctg gtccttccg ctgcagtgcg  660
agccgggctt cagctggggc ctaacaaccg ntcctgtgtt gatgtgaacg aatgtgacat  720
gggggcccc a tgcgagcagc gctgcttcaa cttctatggg acccttctgt gtcgnttgcc  780
acaaggctat gactgcatcg ggatggcttt tctgcatgat attgatgatg taactact   838

```

<210> 409

<211> 844

<212> DNA

<213> Homo sapiens

<400> 409

```

aagagttaaa tgaaatactg gttttttaa tggttagaac agagactgat gcacataagt   60

```

attcattatt ataattcagt ttttgcattc tttaaagtga agctgtgttg ttgcagtatt 120  
 ttaaggatat attgttcccc aaatttttgg gtaaaattga ctgttaagga agatgagtca 180  
 tgttttaaact gtaattgtga gtagaccacc ctttatcctt gaagggtttt ctcaaccagg 240  
 tgaatggcat ggctgtgggtg ggaaatacag ggccctgtga gacaggaaat ctaggggggtt 300  
 gtctagctcc attaccatcc tcttctttta tggattcagt gtcttgttct tttgttccat 360  
 gtgagaatca tccctgccct gcctacgtta taaagctgga gaaaaatgaa ataagtaaaa 420  
 acacatggaa aacgtactaa aatattaatg caaggatgca aggtataatc tttgctggaa 480  
 cattagtcc tcatttatta gtaacattac aggcatgtga aattatgtac tttatatggg 540  
 acctatattt taaatatatg ctaatcatcc tagaagccct acaaggtagg tgttactttt 600  
 ttccatttta ccattaagga aattatccag gtttacacaa cttgaaccca ggtctctgtc 660  
 agtaaaaaac tgtctactct tccaaaccat tttatctatc catatttatt tcttccatca 720  
 aacattagtt gaatgcaatg tgggtgtatca cccaangtcg gctggcatct ttgaaaacca 780  
 taactatgtg ttactcagca tcttagcacc tagccaaaga agtgagaaat nttacagtct 840  
 ttca 844

<210> 410

<211> 827

<212> DNA

<213> Homo sapiens

<400> 410

ttctcctttc gcctatatgt aagtatgtgt tctgcaggct gatatcatag gccaggttac 60  
 cataggccaa gttaccagga ttaattacag gtcagatcac aatgtaataa gcactaggaa 120  
 agcaaatttt tggcctactc agttcaagaa gtgttcaactg tcagaattta aaataagtaa 180  
 atgacctcag agacaatcca gtccaagtcc cttattttat acttgagggg actgaggcct 240  
 gaagagattg acttgtctaa gctcctagca gttagaagaa ccagaaatag attgcagatt 300  
 gccagatata caaagaatct ggtatctttt cttctactat aatggactag atgtagtttt 360  
 taaatgaatc agcaactggc cctataacctg gcaacaaagt gagcactcaa attgtcaaag 420  
 gcacaaaaag gccagatgta acatggcgcc cacctcttcc aaggtcagtg ggggggtttt 480



cagttgccac ttgaggggaa caggtgtaga agagtagtga gcaacttaca gctctccaac 540  
cacgctgttg caggaagctc cgagatgaaa ctaccttctc cttctgtctg gagagtgact 600  
ggcctggagg ggtgaagggtg gaccttgctg gcaggggact cgcactagtc tggaggagac 660  
agattcagca gctgaaccga gtcagcctgg aaatggccag tgcanttgtg aatgcctatc 720  
ccttcccaca gctcctggta cangettatc agcagtgttt ttcgataaa gaacgccaga 780  
atttgctcgc agacatacag gtgccccnt gggggaangt gtgacat 827

<210> 411

<211> 834

<212> DNA

<213> Homo sapiens

<400> 411

ttgaacctat gatgaatgaa agaaatgaag tttcctatat aggtggttat gtcataagtg 60  
ttatatcata agtgggtgta tagtatcatt attacctact atcaggaata atttcttttc 120  
actctctcat tattcttgtc actgttgaat gtctcaagag ttgtgtgtgt attcagtttc 180  
tatttccctc tctgtctcat ttactgactc cagtctgact aatgctctaa tatgctcttg 240  
agaagtcacc atgaactcca tgttctgag cccagtggac actttctgtc ctccactta 300  
acctctctgc acagatagat tccgtacaga gagaaagtg atcacttcct ctcttctcag 360  
cttctctgac accaattctg tatttttctt ctacccttt ggctaattctt gatttttaag 420  
acactttgtg ggctaacaaa acattctgtg gaatgagttc aacatatatt acaatttccc 480  
ctttttaaaa atcatgttat tctgtttcat ttacagctct tcacattctg tattgatttt 540  
taaaaatatt ttaaaattgt ttctctttcc tccactttga aagctttatg aaagaataat 600  
ttctgtctat tgcctaatac tgtgtatcat cactgtgctt gacacgtagt tggtaatctc 660  
taagtatttg agaagcagtg agttaattaa tatttgcttt ttgactttt ttagggattt 720  
taagtatttt tgacatctct ttttgggaat ggggtaaaag aattgtagag gactattaaa 780  
tgaccagngt aaccattgtt gtaaagtgtg ggtaatatga cttgggaata atgc 834

<210> 412

<211> 833

<212> DNA

<213> Homo sapiens

<400> 412

```

cacattccag aaaaaaatac cgctttcaca aaactcgtc cgcatgaccc acagaacacc 60
caaggtcaaa aagagtccaa agttcagaaa gaaaagttat ctgagtagac tgatgctcgc 120
aaacaggcct ccgttctctg cagcgaagag cctcataaat tcccccttcac aaggggcttt 180
ttcatcctta ggagacctga gtcctcaaga aaaccctttt ctggaagtat ctgctccttc 240
agaacatttt atagaaacca ctaatatataa agacacaact gcaagaaatg ccttggaaga 300
aaatgttttt atggaaaaca ctaacatgcc agaagtcacc atctctgaaa acacaaacta 360
caatcatcct cctgaggcag attccgctgg gactgcattc aacttagggc caactgttaa 420
acaaactgag acaaaatggg aatacaacaa cgtgggcact gacctgtccc ccgagcccaa 480
aagcttcaat tacccattgc tcagtttgaa attcagctaa cccagcagct acagtcctt 540
atccccaaca acaatgtgag aaggctcatt tctcatgtta tccggacctt gaagatggac 600
tgctctgggg cccatgtgca agtgacctgt gccaaagctca tcttcaggac aggccacctg 660
atgaagcttc tcagtgggca gcangaagta aaggcatctg agatagaatg ggatccgacc 720
aatggaagac tgagaactac attaatgaga gcacggaagc ccagagtgc ngaaagagaa 780
gtcgttgag ctcccaaaga agtttcagga tacggtattc tgacaactna ttt 833

```

<210> 413

<211> 678

<212> DNA

<213> Homo sapiens

<400> 413

```

aaagcgccat tacgcagaga gaaagttacg aggttcgtgg ccgcggttc cccaggcagc 60
tggcgctgga ggcttcggcg tcacgtgctg gtctggattt ttctcgatgc actggggaaa 120
gcggtggact cttatcgtgg gagggctctt gatctgtgat ttatagatag gcacagctac 180

```

tcccgttcgg gaaccaacg gcagacaggt cctagtcccc atcagatacc cgcggccggg 240  
 actcggagct gtgggggtgtg gggaggcgga ggcaccaact aagagcgacc tagcatcgca 300  
 aagccgccct cggggcgctc atggcgggac gcctcctggg aaaggcttta gccgcggtgt 360  
 ctctctctct ggccttggcc tctgtgacta tcaggtcctc gcgctgccgc ggcatccagg 420  
 cgttcagaaa ctcgttttca tcttcttggg ttcattctaa taccaacgtc atgtntggtt 480  
 ctaatggttc caaagaaaat tctcacaata aggctcggac gtntccttac ccaggttcaa 540  
 aagttgaacg aagccaggtt cctaatagaga aagtgggctg gcttggtgag tggcaagact 600  
 ataagcctgn ggaatacact gcagcctctg tcttggctgg acccangtgg gcagatcctc 660  
 ngatcaggga aagtaatt 678

<210> 414

<211> 789

<212> DNA

<213> Homo sapiens

<400> 414

cttcatgtga attttccaat tttgggtgtt ttcatagaaa acttcaatgc cagaccagct 60  
 tccctggtta cttagcatat atttgtgacc atttcatatg cactcataaa tatccaagga 120  
 tttcaggccc agccaagaaa aacataagaa gggaggtaaa aaggatgttg gacattgact 180  
 tagtgtactt tttaaaccga acaaaagcga tgtggtgatt atctcccttt tcgaaggatt 240  
 catgccactg taatgagaga ggcagtgtag gcaaatggtc tgagccttgg atggagattg 300  
 aagtccctgac ttcagctggg aaatccttgg taagagtctt tctgtacctt agtttcccta 360  
 agtgagaata agagagtttg acaagacgaa tgtatctcca ggttccaatt tttctgagaa 420  
 tggttgatag agaagctgct ctctccttaa aatgcatgga ctcaatggct tgaagatatt 480  
 ccccatgggg aaccattgcc acggaggcct tgcatgcaag aagtttgggt ggggacagtg 540  
 aggaactgaa acacaagcac cttccaccaa ttattgctgt gaagaacctg agcctgaaga 600  
 agtccatct aatttttttc ccagagttcc agattttagg gtgcaatcat ccagcctata 660  
 catgtggctc atagttcaaa aaattaaaag caaaaccaga actctncagt aggaatggag 720  
 aaaacctatc tgtaggctga actggcttct ttggcttaag angcactggt cangggaaaa 780

aagctgctt

789

<210> 415

<211> 284

<212> DNA

<213> Homo sapiens

<400> 415

```
ctctctgcgg ggcgccgttc ccgcgccacc gagggcagct aactcctagc agaggaccgg 60
ggtcgcggcc gccgggggcg cagcgcggtt agggcgggcc cgccacggcc caggcactcc 120
cgctgggccc tgccgggcct cacccttccc cgcgcagcga ctcggaagt aggacatcct 180
gtggagagcc caggaccgg gagacgccct gggaggaggt ggcaggatg ggggcgatgg 240
ggggtcagag cggcttaggg gtgaccaggg tggggtgcgg annn 284
```

<210> 416

<211> 771

<212> DNA

<213> Homo sapiens

<400> 416

```
attgcctccc cgaccacac tggctggact actgccagg acagaagagg ggggttggt 60
gtgagtgggg aggaggtgga agcggtagat tcccagcaca accttcttcc tcccaccccc 120
aaaacctcca tctgaagaag gcctgaggaa gctgtcaggc tgctgcctg attcatecct 180
tccctctggg cgtagccact gagtctgtg ggctgatgct tctgaataca aactatggca 240
cctggaaggc actgcagaga aaggggggac ctcagggctc ccattccatc actcttgagt 300
ctaggtcata cctccacaa tcccgaagag gcccgtagt tctcttctga tgggactcct 360
gggttctgtg ttgccaccc tgcaaactg catgccagca agtatgggtg acccggtggtg 420
ctgctgggtc accttcattt ggggtgctagc cttgctgcct tcctttgggtg ctgttgagat 480
gtccttgcc gtgttcactc ccagcgcagg catgccctgg ccccaggctg tggctccgat 540
```

tcactcttac tgccatgctt tggctctcatt ttttgcttcc acagtaagtc tgcacaaaat 600  
actgtcctca cagctgagct tacctgggtga tctattcttt tttctcggtc actacttgtc 660  
cagctttttt ttttanactt ttggagacag tgattgacaa cagaacctaa caccagggtc 720  
gcgctagtcc cctacccctt canacctgtg tcangcatat gactgatgga t 771

<210> 417

<211> 866

<212> DNA

<213> Homo sapiens

<400> 417

cacagctgga atgtggttgg cttgttgact tctgttccca gcatagtga cagtgggcac 60  
tataagccag taggcactca attgatgatt cttcaatgaa ataattgatg ccacttttag 120  
gtcagtcttt cttgtacgtt acaccttctg ttgttcaaca gagccccaca atatcccaga 180  
acttggagggt cttatctcgg ggtttctcag atgttggagt acccaggtat cacctgctga 240  
gccagtttcc ctggcctcac ctgcaggggc tctgagtcag taaatctggg gcaggcccag 300  
tactttgcat gtgagcacag acccaggtgt ttctgaacct ggtgggtccag ggactgctgc 360  
aggaaggagc caataggact gcatgcctta caggcagtgg gtctcatcca tccctatcta 420  
tggcactgac tacaggccat gtccaggcca catgggcaca tgctattata attattttgt 480  
gcgatggatg agttacagaa ctggagccct aagacctgag ttctagtttc agctctgcc 540  
gttgctggct gattgaaact gaacaagcca cctgccttcc ctgagactgt ctcttctcct 600  
gtgaaattag ggcattagaa tacatgaaga cccctttatg tccttaataa cctgtaagtt 660  
taagaaccta gggaatctnc atgctgggtg ctgcgggtat atccccttat cctcaactcg 720  
ngaagaaaga gtcaaaatgg caacanggtt gtgtcaactg ctcttcttag caagcttattc 780  
attaagggga aatggccttt ggcaattttc ccagccctta acaacattnc cacaacgggc 840  
naccattnac cttaaaccat ttgggg 866

<210> 418

<211> 797

<212> DNA

<213> Homo sapiens

<400> 418

```

aatccattgc agctcgtctt atcaatgcta cctttttatt tttttctttt ttgagttagg   60
gtctcactct gttacttagg ctggaataca gtggcatgat cacggctcac tgcagcctta   120
acctcctggg gtcaagccat cctcccacct cagcctccca agtagctggg actacaggca   180
catgccacca cgcttggtta atttttgtat tttttgtagg gacggagttt cgccatgtta   240
gccaggctgc ttttgaactc ctgagctcaa gcaatctgcc tgcctctgcc tcccaaagtg   300
ttgggattac agaggtgggc cactgtgcct ggccttctaa tcaatgatac ctaattctgt   360
cttcggtcag tggaactcaa ctcaatttgt ctctgagtc cttttgaaac tattctaatac   420
ttgtcagttt cctcgttttc tggatatgta agatttccag gatcatgttg tacattttca   480
gtccagatct gaaatcagtc atttctccaa ggagccctgg tttgtttgga aatgggtattt   540
agcaaccagt ctgggcaata agcaaattca ttgccacttg tttggtcata ggccttttctg   600
gtggacagag ctaggaaaat attacctgat tctccctcta gccacacaaa tcatgttacc   660
ttctgggtcat ctgaagggtcc tctcttctnc aagcggaaac cctctcaacc ctgcctcagt   720
cagtgccaca gttttgaatc tcctaactat atgnnggctt tctgcactct taatttggga   780
agtgccactc tttntttt                                     797
    
```

<210> 419

<211> 800

<212> DNA

<213> Homo sapiens

<400> 419

```

tttcatcact taaaagaacc atgtctatta aagaatctag ctactggag tgcattgccca   60
ttccaaaaaa gaagatgaat ttaaaagata aaagccatga aggtgttgct tgtgtccaga   120
aagaaaaaatc agtagttaaa acctgggttct gtgaatgcaa tcagcgattc ccaagtgaag   180
atgcagtaga aaagcatgtt ttctcagcaa acacaatggg ttataaatgt gtggtctgtg   240
    
```

gaaaggtatg tgatgattca ggggtcattc gtttacacat gagccggatt cacggagggg 300  
cacatttaaa taactttctt ttctggtgtc ggacatgcaa aaaggagtta acaaggaaag 360  
atactatcat ggcacatgtg actgaatttc ataatggaca cagatatattt tatgagatgg 420  
atgaggtaga aggtgaaact ttgccatcat cctctacaac attggataat ttgactgcta 480  
acaagccttc atcagctatt actgttattg atcattcccc ggcaaatagt tctccgaggg 540  
gtaaatggca atgccggatt tgtgaagata tgtttgattc ccaggaatat gtaaaacagc 600  
actgcatgtc tttggcaagc cacaagtttc atagatacag ctgtgctcac tgcagaaagc 660  
cttttcataa gatagaaaca ttgtccgaca ttgccaagat gagcatgaca atgagataaa 720  
gattaaatct tctgtgggct ttngatcctt atctttaatg nggaagaaca tttctgagtc 780  
attatgagga gcaccacagc 800

<210> 420

<211> 823

<212> DNA

<213> Homo sapiens

<400> 420

gttcacttaa aattcataga gagacatgta gaaatacata ctagataatg aaaggatcca 60  
aacagtgaag aagcagtcctt tttatatattt tgaatttttt ttcaagagta aagtgtgtta 120  
tgatagtcatt cttgatttgt ttgaaatgat gtttacaat gctattaaaa ttataaatcc 180  
tacattttac ttgtgaattt tttggtctac ctttctagtt gtaaaatata aaaatcctaa 240  
aagatcatat tgattaactt cttggtggaa tcacttatct tgttttgatg ataggagcag 300  
tatagcatca agttctagag gaattgggag ccattgcaaa tctgagggtc aggaggaatc 360  
tttcgtccca cagagctcag tgcaaccacc agaaggagac agtgaaacaa aagctcctga 420  
agaatcatca gaggatgtga caaaatatca ggaaggagta tctgcagaaa acccagttga 480  
gaaccatatt aatataacac aatcagataa gttcacagcc aagccattgg attccaactc 540  
aggagaaaga aatgacctca atcttgatcg ctcttggtggg gttccagaag aatctgcttc 600  
atctgaaaaa gccaaaggaac cagaaacttc agatcagact agcactgaga gtgctaccaa 660  
tgaaaataac accaatcctg agcctcagtt ccaaacagaa gccactgggc cttcagctca 720

tgaagaaaca tncaccangg actctgctct tcaggacaca gatgacaggg gatgatgacc 780  
ccagtccttg atcccaggtg ccanggtatc gaaccggacc tgg 823

<210> 421

<211> 832

<212> DNA

<213> Homo sapiens

<400> 421

tttttcggac ggctgcagca tcgcggtggg gatcgaaagc gggggcttct gggacgcagc 60  
tctggagacg cggcctcgga ccagccattt cgggtgtagaa gtggcagcac ggcagactgg 120  
tcaaacaaat ggattttaca gaggcttacg cggacacgtg ctctacagtt ggacttgctg 180  
ccagggaagg caatgttaaa gtcttaagga aactgctcaa aaagggccga agtgtcgatg 240  
ttgctgataa caggggatgg atgccaattc atgaagcagc ttatcacaac tctgtagaat 300  
gtttgcaa atgttaattaat gcagattcat ctgaaaacta cattaagatg aagacctttg 360  
aaggtttctg tgctttgcat ctgcgtgcaa gtcaaggaca ttggaaaatc gtacagattc 420  
ttttagaagc tggggcagat cctaattgcaa ctactttaga agaaacgaca ccattgtttt 480  
tagctgttga aaatggacag atagatgtgt taaggctgtt gcttcaacac ggagcaa atg 540  
ttaatggatc ccattctatg tgtggatgga actccttgca ccaggcttct tttcaggaaa 600  
atgctgagat cataaaattg cttcttagaa aaggagcaaa caaggaatgc caggatgact 660  
ttggaatcac acctttatgt gtggtgctc agtatggcaa gctagaaagc ttgagcatac 720  
ttatttcac gggtgcaa atgtcaattgnc aagccttggc caaagctaca cccttgggtca 780  
atggttgntc aaganggaca ccccaaaatg gtgtggagct tttgcttttc ca 832

<210> 422

<211> 853

<212> DNA

<213> Homo sapiens



<400> 422

cattttaaaa agaaacttct ccaaaactac attagatatt tatatctcac atgtctttag 60  
 attccatttt cctaagctgg gtttgggtgg atcactctgg taatatgaga tgggccatgt 120  
 tctgcatctt gaagttagag tttggccaat ttaggctaca tctggagggg gtgatctcat 180  
 tctcattctg cttctgggaa tgggtgtacta gtgtggggat gtgcttgtgg taaatggaga 240  
 agagcaagaa actccaatgt ggaagccatc tcaaagacgt atacaaaatt tactaatttc 300  
 cagttcatca aagcaaatta catgagtgag ctgagattcc aaggtcaagg tagtcaccct 360  
 gcctatggca ggaggacact gcaagataat atatcaaagg atgagggagt caagagtatt 420  
 tacaaaacag ctgaatagtt taattaaata attaataatt aaacattaaa tagacttgag 480  
 agtaacttta ccaaaggcct aagcatgaga aatatgtttg atagatatta ttctgggtctg 540  
 aaaaccctga gtgggaaaac agaactaatt ccacctggat gaccttctgg aaactcattt 600  
 tttcattttt ttaaattaaa agaaaataat tccttccaac cccaatgggt ttaagtgtgt 660  
 gtttttgtgt ttatgagctt ggtaacaata aagtcataata aaagtattgg ntagcagcaa 720  
 cctgatttta aggcgtatgg ccttcttgng gtccaagaa aaccttgat gatattgata 780  
 aaaggtttgg gttctggata tttaaatcta cattaaaaaa taaatccata tttatccnat 840  
 cctagnatga nca 853

<210> 423

<211> 872

<212> DNA

<213> Homo sapiens

<400> 423

gataactcata tagtagagat ctagaccttg ctaagaaaaa acatgcttcc ctgaggcaga 60  
 cggagtctga tccagatgct gatagaacca ctttaaatca tgcagatcat tcatcaaaaa 120  
 tagtccagca tcgattgtta tctagacaag aagaacttaa ggaaagagca agagttctgc 180  
 ttgagcaagc aagaagagat gcagccttaa aggcggggaa taagcacaat accaacacag 240  
 ccacccatt ctgcaacagg cagctaagt atcagcaaga tctccggact gaacgattac 300  
 aaaaaacaac agaacgtttt agaaatcctg ttgtgttcag caaagattct acagtcagaa 360

aaactcaact tcagtctttc agccaatata ttgagaatag accagagatg aaaaggcaga 420  
 gatcaatata ggaagatata aagaaaggaa atgaggagaa ggcagcgata actgaaactc 480  
 agaggaagcc atcagaagat gaagtgcctta ataaagggtt caaagacacc agtcagtatg 540  
 tagtaggaga attggcagca ctagagaatg agcaaaagca aattgacacc cgtgccgcgc 600  
 tggtaggagaa ggccttcgc tatctcatgg acacaggaag gaacacagaa gaagaagaag 660  
 ctatgatgca ggaatgggtt atgttagtta ataagaaaaa tgccttaata aggagaatga 720  
 atcagctctc tcttctggaa aaagaacatg atttagaacg acngtatgag ctgctgaccc 780  
 gggaattgag gcatgctagc cattgaagac tggcagaaga ccgaggccan aagcgacgcg 840  
 acagttntgc tgatgactgg tggncctggg ga 872

<210> 424

<211> 859

<212> DNA

<213> Homo sapiens

<400> 424

aaaacgtttg tatctcaagc aagtgcctaca atgcaacagt atgcacagag agataagaaa 60  
 catgaatatt gggttgctgt gccacaagaa aggacagatc acttgatgc cttcttcatt 120  
 cagtggagtc cagaaatata tgcagaagat actggcgaat ataccagaga acctggattt 180  
 atagtagtaa aaaagattga ggagtctgaa acaattgagg attctagtaa tcaagcagca 240  
 gccagagaat gggagattac tacaagggaa gacataaatt caaagcaggt tgctacagtg 300  
 aaagcagacc tggagtctga atcttttcga ccaaacctaa gtgatcccag tgaactttta 360  
 ctgccagatc aaattgaaaa gcttaccaag catcttcac caagaacaat tggctatcca 420  
 tggactcttg tttatggtac tggaaaacat ggcacaagct tgaaaactct ttatcgaaca 480  
 atgacaggtt tagacacccc agtgctgatg gtgattaaag acagtgatgg acaggttttt 540  
 ggtgcgttag catctgagcc actgaaagtg agtgatggct tttatggtac tggagagacc 600  
 tttgttttta cattctgtcc ggagtttgag gtctttaagt ggacaggaga tgatagtgtt 660  
 tttatcaaag gagacatgga ttcactagct ttcgtggtgg aggaggagaa tttgcgcttt 720  
 ggcttgatgg agatctctcc atggaagaag ccattcttgn aaaacgtttg gaatcgacac 780

tttctaagaa ggaagattct tatccagata tgaaatctgg cttttgaata ataaaagctc 840  
 ttgcttanag gagaaggcc 859

<210> 425

<211> 760

<212> DNA

<213> Homo sapiens

<400> 425

gaaacagaaa cagaatgcat ggctgctcaa aaagagtatc tttttgtgct ttcttgaggg 60  
 agaggggttg ggaggggaaa ccctccaact cgggctggct aacagggatg cttccttatg 120  
 aaacgtgctc acctaagaat accagtgaga ccatcggcac tttctgtaat tggcagcaat 180  
 agagctatta gaagaaacat gaaagagata gatggatctg aaatcaacat ttgtaacaaa 240  
 aggcctcacc atgttcccca gcacaaatgt gctactgatt agcagctaaa atgtgagcat 300  
 ccctactcaa attcaccctg ttctcccat cctgaagggt ctgatattaa tgcataacat 360  
 tgtagcttat aatgctttta cttaacatta tcttattcat gcatcatcag agaatgatct 420  
 accaaaatgt atggagagaa agctaaaaat gtaaagtggc tgttctcaat cttagctaca 480  
 tattagaaca acttggggag tttttaaatt ctgtgataac cacactgccc tcagaccaat 540  
 ccgaattctg gggcttaaat ccaggtggag tgctagccac atgtagagca gctttctgct 600  
 ttcatatata tctgggctta ggcctcgggt agggttggga agggcctatg acctctgaag 660  
 agccttcaca ttacagccca ggaacagctg gccacagca ggagagatgc agagcctgan 720  
 gtgganggcc aagcctgggg aatanggggt gctttgaaaa 760

<210> 426

<211> 877

<212> DNA

<213> Homo sapiens

<400> 426

actcttgctg tactacaaag agatagaatc aaactgcttt ttttcgacat actgggttttt 60  
 ctttctgttt ttctttctct tcttctatct cttgtggata ttatggctaa taacacaaca 120  
 agtttaggga gtccatggcc agaaaacttt tgggaggacc ttatcatgtc cttcactgta 180  
 tccatggcaa tcgggctggt acttggagga tttatttggg ctgtgttcat ttgtctgtct 240  
 caccttccgg cgacaagctt ccctggaaca agcaaattcc tttccaagaa aatcaagttt 300  
 cagagcttct actttccatc cctttctgca atgtccacca cttcctgtgg aaactgagag 360  
 tcagctgggt actctccctt cttccaatat ctctcccacc atcagcactt cccacagtct 420  
 gagccgtcct gactactggt ccagtaacag tcttcgagtg ggcctttcaa caccgcccc 480  
 acctgcctat gagcccatca tcaaggcatt cccagattcc tgagtagggt ggcttttgg 540  
 ttttgtttct ttcttgtctt gtcttttatt gaaaggaaat caaaaatagg ctaaacagaa 600  
 ttttgagggc atggcccaaa taactcatga gttccaagtt gaaacatggt tgtgcaagtt 660  
 ggacattaca atgtttttag tagagatgaa gtgtcactat gttaccaagg ctggtctcaa 720  
 actcctaaac tcagatgac ctctgcctc ggccttcaa agtggttgaa attagcctgg 780  
 ccaatcttgg attttaatgg gaaatgtggg ccccaaatg accgaacata ggacattcta 840  
 aagttccttg gattggatca ttataagaaa gngnggg 877

<210> 427

<211> 866

<212> DNA

<213> Homo sapiens

<400> 427

atttatgggtg gtagctttcc aaaattatat agatacctct tacacaatct caagctctta 60  
 cagcaagctt gtccagcctg tggtcgcaca caagtttata aactttctta aaacattgtg 120  
 agttttttta ttttttattt ttttaagct catcaactat cattagtgt ttttatgtgt 180  
 ggccaagac agttcttcca gtgtggcca gggaagccaa aagattggac accccttata 240  
 acatcttaga agttttaaat aattatcttc atatccacat agctttacaa aagctcacga 300  
 cagggagagc attttcttgg ttctgtagta atttcagggg gtttactgat tggaaccctt 360  
 ccttttctc ctctctccag tccagctggc attcagtcct ttaaacaatg tggtatgca 420

gtacttttga ttactaatga cttctattac cttcttcccc attgtgtaca gatgggagaa 480  
 tcctcagcac aagtgtctac tactattgga tggacagcgg cagatgttca cagcgcgtca 540  
 tgattaatta gtttaaattg caaggttcta tctgtgaggt agctcaggta gatttaaggg 600  
 cggtagacat gaactgaagt cacgtttgcg cagcggctct aggtatacac ttcacattgn 660  
 ttctttgcag gtcgcacagc attttaatct gcgcccga tgcacaatgc gcgcatgctt 720  
 gncgtccagt ggaagcttca tgaacaaaag atagnaatta tgccaataaa tggtgaaaga 780  
 cttttggata tttatccaat tatttataaa tataanggct tggaaagaat ggccatgntg 840  
 aaatttgaac aaattggaag tttttt 866

<210> 428

<211> 765

<212> DNA

<213> Homo sapiens

<400> 428

taatgcaact aaaatgttct cgggttttagt accaagcgta ctagtatgag aggcattgaga 60  
 tgttccggca gtatttacac ctaattttat gagatttcca aaacttgatg atttcaggtc 120  
 cttegcaaca tggtagactg tgcagacctg agcaacccca ccaagtcctt ggaattgtat 180  
 cggcaatgga cagaccgat catggaggaa tttttccagc agggagacaa agagcgggag 240  
 aggggaatgg aaattagccc aatgtgtgat aaacacacag cttctgtgga aaaatcccag 300  
 gtatctaata tgagattttc aaagtttttg tgagctctgc tgattataga gctggagggt 360  
 tctatttaaat tccgtttttc caatagaata tgtatatatg aaacaataag gagacaacta 420  
 cgcattttgt tccattatag tcaggactca tgcgacttct ccattacact cagtttcaca 480  
 ggggtggggaa aagtagtcat cagaaacca tcaaaatttg gactatgtgt ccctaaatca 540  
 tttagatagt tgtctctgat gttagcaaat ccagctgaat aatatgaaca tcagtgtctc 600  
 ctccatccca accctctgga tttctcctag ctctgtcttc attcaagaac tctactctc 660  
 atccttgctt ccagccctct gnttttatct tctgncctta atcaagccca tggtgaccat 720  
 caccagangc agtctctttt actgcatagt caaagccctg tcttg 765

<210> 429

<211> 848

<212> DNA

<213> Homo sapiens

<400> 429

```

aaagcaaaaa aattagtaga aatggaaaga gaacatgaaa aatcacttag tgaaattaga   60
cagttaaaga gagaacttga gaatgttaag gccaaagcttg ctcagcacgt caaaccagag  120
gaacatgaac aggttaagag cagattagaa cagaaatcag gagaacttgg gaagaagatc  180
actgagttaa cattgaaaaa tcagacacta caaaaggaaa ttgaaaaagt ttatttggat  240
aataagctcc tcaaggagca agcacataac ttaacaattg aaatgaaaaa tcattatggt  300
cctttaaaag taagtgaaga catgaaaaag tcacatgatg caattattga tgatcttaat  360
agaaagcttt tagatgtaac acaaaaatat acagaaaaga agttggaaat ggagaaattg  420
ctactggaaa atgacagctt aagtaaggat gtaagccgcc tagaaactgt gtttgtacct  480
cctgagaaac atgaaaaaga gataatagct ctgaaatcca atattgttga acttaagaaa  540
cagctgtctg aacttaagaa aaaatgtggt gaagaccagg agaaaataca cgctctcaca  600
tctgaaaaca ctaacttgaa gaagatgatg agtaatcagt atgtgccagt taaaacccat  660
gaagaggtta aaatgacact gaatgacacg ttagccaaaa ctacagagaa ttattagatg  720
tgaagaaaaa atttgaggat ntaaatacagg aatttgtaaa aattaaagat tagaatgaaa  780
ttttaaaaag aacctggaaa acactcagaa accaattaaa actgagtnca ttancctggc  840
anacccca                                     848

```

<210> 430

<211> 832

<212> DNA

<213> Homo sapiens

<400> 430

```

ctagaagagt tccggtccga ttctgcgaaa gaggaagtga gagaaagcgc gtactacctt   60

```

cggtctaggc agcggaggca gccgcgaccc caggaaaccg aggaaatgaa gacgcgaagg 120  
 actaccgcc ttcagcagca gcactcagag cagcctccgc tacagccgtc tcctgttatg 180  
 accaggagag ggctgcggga ctctcattcc tctgaagagg ttgaagcacc ttcccaaact 240  
 gatttaagcc aaacgatctc aaagaaaact gtcaggagca tacaagaggc tccagtgagt 300  
 gaagatcttg taatcagggt acgtcgaccc cctctaagat acccaagata tgaagccacc 360  
 agtgtccaac agaagggtcaa tttctctgaa gaaggagaaa ctgaagaaga tgatcaagac 420  
 agctctcaca gcagtgtcac tactgttaag gccagatcca gggattctga tgaatctgga 480  
 gataaaacca ccagatcacc tagtcaatat atagaatcat tttggcagtc atcacaaagt 540  
 caaaacttca cagctcatga taagcaacct tcagtgttaa gctcaggata tcaaaaaact 600  
 ccccaggaat gggccccaca aactgcaaga ataaggacca ggatgcaaaa tgacagcatt 660  
 ctgaaatcag agcttggaac ccagtcacca tcaaccttca gcccgacaag tgactggaca 720  
 accccaaaat gcactctttg tcaagaggaa cccgggtgtg gctacttctc ctggatagct 780  
 gctcttggt tttgggaagt ttttgggttc ttttaagnact tcctggaggt ng 832

<210> 431

<211> 603

<212> DNA

<213> Homo sapiens

<400> 431

ggagaatgct gatagaatgg tatttttga tcaagatagg aggggtgtgat atgggaactt 60  
 ctagtccccc cttttctcag gagagagctg tcttttgaag aaatccatcg cacgaaaagc 120  
 aggcgagaga ggggaaacct gacattgttt gagccctgc agtcagctgc catcaaagcc 180  
 tttgacttcg catgacttga accactgaat catttttttt ctttttttt ttttttgaca 240  
 gagtctcgct ctgtcaccca ggctggagtg cagtggcacg atcttggctc actgcaacct 300  
 gcgcctcttg ggttcaggcg gttctcgtgc ttcagcctcc cgagtagctg ggactacagg 360  
 caccgccac cacatctggc taattttgt attttttagta gagacaggat tttgccttgc 420  
 tggccaggct ggtcttgaac tcctggcctt aagtgatcca cctacctnag cctcccaaag 480  
 tgctggaatt acagggtgtga gccaccacac ccggcctgaa ttgtctttta tctcaaggtc 540

cttcattgct actcaaagtg tgctccacaa cccancacag ncacatcatc gganagcttg 600  
cta 603

<210> 432

<211> 880

<212> DNA

<213> Homo sapiens

<400> 432

gttaccagct gcccaagggc agtcttgata ttatcattct catatttggt ctttcagcaa 60  
ttgttccaga caagatgcag aaggctatca acaggctgag caggcttctg aaacctggcg 120  
ggatgatgct tctgcgagat tacggccgct atgacatggc tcagcttcgg tttaaaaaag 180  
gtcagtgtct atctggaaat ttctacgtga gaggtgatgg aaccagagtt tacttcttca 240  
cacaagagga actggacacg cttttacca ctgctggact ggaaaaagtt cagaacctgg 300  
tggtatgccg actgcaggtg aaccgaggaa agcaactgac aatgtaccgg gtttggattc 360  
agtgcaaata ctgcaagccc cttctgtcca gcaccagctg agaggcacct gctgccaaca 420  
cgatgcaagc ccatttgtgt tccgggcctt ttttaaaaaa aaaattgtag cactgggcgt 480  
ggtgcatgcc tgtaatccca gccactcagg aggctgaggc ggggaggatc cattgagccc 540  
agcagtccaa cctgggcaaa atagtgagag accctgtatc tgaaagtaat aataaaaata 600  
aaaaatataa atgaggtctc gttgatgttg gacaattcaa gaattcagac ttgaacctta 660  
aacctaggaa aagttacttt gtatcaggat tctaacaatt atgcttcata tttgtgaagt 720  
cctttaaac ataattttct caagttcttt ctttgagatc tcaatctgnc ttaacatttt 780  
gnaactaata actgaaattt tattcaaagg aattgnaaac cttaaaccce ccaatttatt 840  
tccatgtgaa aaagtgttac atatgacaag tgttttttgn 880

<210> 433

<211> 840

<212> DNA

<213> Homo sapiens



<400> 433

```

gttcagctaa gtactagga ggcttcatta gtcagtagga tgtttttata tataaatgta 60
gcaaacatat attacagttt tcaactgtgta atagattatc cataataatt cataaatatt 120
cctgctgaag ttagtttgta acttcaagtc aaagatgaaa aatatcaatg gtgaagattg 180
attgttcata tagagaggac gttttttttc cagactgtaa aactgaatct tgttgaattt 240
aaagagaaat tctggcagag gcagatgaat cacctgaggt caggagtttg agaccagcct 300
gatgaatatg gtgaaaccca gtctctacta aaactacaaa aatagccagg catggtggtg 360
ggtgcctgta atcccactcg ggaggctgag tcaggagaat tgcttgaacc cggaggtgaa 420
gattggagta agccaagatt gtgccgttgc actacagcct gggcgacaga gcgagactcc 480
atataaaaaa aaaaaaaaaa aaaaagctgg gcgtggtggc tcacacctgt aatcccagca 540
ctttgggagg ccaaggtggg cgaatcactt gaggtcggga gtttgagacc aggtgaccaa 600
catggagaaa ctccatctct actaaaaaat acaaaattag cccggtgtgg tggcgcatgc 660
ctgtaatccc agctactcgg gagactgagg caggagaatc gcttgaacac gacaggtgga 720
ggttgcagtg tggcgagatt gcaccattga ctccantctg ggcgacagga nggaaactca 780
tctgaaaaaa angagaaatt cttttatttc tacttctctt caaattggct tatgcatttt 840

```

<210> 434

<211> 912

<212> DNA

<213> Homo sapiens

<400> 434

```

ttctaagtct ttttaaggctt cttttcagcc ctctctctc gtaatccaca aatactgaga 60
ccaaggcatt ttttgggtca gtcctaattt caagcattct atcctgccct ccccaaata 120
actcacactt attagaccat atgttcctat attagttcag gaagggggaa aaaatgttca 180
tcacacttgt atataagaga tcatagaaaa acagtttact aacctgtgaa aataccattc 240
attctctgtt tacctctggt ccacagctaa gcaatcagta ggatataaat gtaccctatg 300
ttcactattc agtattcata agtatactac ttatgaattg gaaatctgac acaacattta 360

```

catgacctaa ttttgaaaat ttaaaatagt gtaaggcccc taggcttaat tttacagggg 420  
 aaagattaaa aggacacaag caaacatata ttctctctct gtgctgtggg acactggtaa 480  
 ttttttgact taaaatattt gatacttaaa atgccaaact tctacatttc tgcagtaaca 540  
 aggcagttat catattgaat accatttctt tctctccagt aagtaaatat tagcacatga 600  
 actgaaaata ttaagtgatt ataaaaaagt ccaaataaat tcattaaaat ttagcttggc 660  
 aaaatgtag tttcatgttc ttggtagaag tccttttata tttatattca aatgaaatga 720  
 accaatttac aagccaaagg aaatggcatc aaatatattg acacccctgg cttcccaagg 780  
 gggatttga ttcaatgcct ttttggtcnaa naatctang gtttcttcca cttcangaa 840  
 aaaggaggga gaaatgtacc cccatacctt tggggaaaaa ccaagttttc cgatgggccc 900  
 cagctttttg aa 912

<210> 435

<211> 791

<212> DNA

<213> Homo sapiens

<400> 435

atattgttcc tcagtaagag aaataaagaa attcgcagcc ctttgtttta agaagggagt 60  
 gttttacatg ctttttttgc tttttttttt ttttctccta ccctagcgat gacctcttcc 120  
 aggtagcggt cccttgtgcg cggttggttag taccaggggc ttanagcgag cgcgaccccg 180  
 gggctgcggt ggaggctcct ctgtgagctc tacctgcctc ccatcccgag gcctaggaga 240  
 aggcgggtac ctggccgcca gctgacgccc tgggtgtcac tgtggccctt tagaaacaca 300  
 cagctccatt tcataagcaa aacctcctcc cccagccccg gctcaagcac cattcacact 360  
 gccatccaag ccgcgggcgg ccgtggaaag ggcactggac caccgctc gcgggcgcgg 420  
 tgaggtacag cgatggctcc cagtgccggg cagttcaggt gacaggagct ttccaaagac 480  
 acctagggtc caaaaagcag ggttcccatc tcacaatttg gatttgctca tagaggagca 540  
 gataggacag gctgctcaca ttctctcttt gaaggcactt ccacagtga ctgtcgctgg 600  
 cgggcccctg ggcggtgacc atcgggtgcc cgggagacag cgaggaattg accctttggt 660  
 cactngntaa gccccacta ggctgctgct ctttccaaag ggaangggct gggggaacca 720

ggaaggaagc ccacccccac acctgcatct gncctgggttc aaccaggtaa agggacttac 780  
tgggatcgng g 791

<210> 436

<211> 751

<212> DNA

<213> Homo sapiens

<400> 436

agggtgggggc cggggcgggg tggctgcagc ggcggccggg gccgggagcg ggccctgggc 60  
ggcccaggag aagnagntcc cgccggcgct gctgagtffc ttcattaca acccgcgctt 120  
cgggccgcgc gaaggacagg aggaaaataa gattttatct tatcatcaa atgaggtaga 180  
aaagaatgag aagattagaa atgtcggatt gtgtgaagct attgtacagt ttacaaggac 240  
atctagccca tcaaacctg caaatcttt acatacacag aagaacagac agttcttcaa 300  
tgaaccagaa gaaaatttct ggatggatcat ggtatttaca cacacagtgt atctttctga 360  
aattgtatgg tgaagttatg ggtgatcttt actgttcana atttaggaaa gttctctggc 420  
tgttgcatcc aagtaaaatt aaaataaaat tggttgcaat tttaaaatca agttcttctt 480  
atctgcttta ttcattcttg gggctgtttt aagaagttgt gtttctggtg ctgtagcatg 540  
ttcaaagttt tttaaattaag gcaagataaa catggntaa tgaattcatt gtataatttc 600  
aagtttatca aactttgtag gttgttcgga atcctataat tgaaaaacag agttcanatg 660  
gaaaaccagt tattgaatat caagaggagg agttgtttgg taatgggtgc attgggtgtt 720  
taatnattta tttttttaaa tgnattgctg a 751

<210> 437

<211> 780

<212> DNA

<213> Homo sapiens

<400> 437

cttccttcta gcagaaatgg cggctgcggc ggctcgagtg gtgttgtcat ccgcggcgcg 60  
 gcggcggtc tggggtttca gcgagagtct tctaattcca ggctgcgg gacggtcatt 120  
 atattttgga gagaacagat taagaagtac acaggctgct acccaagttg ttctgaatgt 180  
 tcctgaaaca agagtaacat gtttagaaag tggactcaga gtagcttcgg aagactctgg 240  
 gctctcaaca tgcacagttg gactctggat tgatgctgga agtagatacg aaaatgagaa 300  
 gaacaatgga acagcacact ttctggagca tatggctttc aagggcacca agaagagatc 360  
 ccagttagat ctggaacttg agattgaaaa tatgggtgct catctcaatg cctatacctc 420  
 cagagagcag actgtatact atgccaaagc attctctaaa gacttgccaa gagctgtaga 480  
 aattcttgct gatataatac aaaacagcac attgggagaa gcagagattg aacgtgagcg 540  
 tggagtaatc cttagagaga tgcaggaagt tgaaaccaat ttacaagaag ttgtttttga 600  
 ttatcttcat gccacagctt atcaaaatac tgcacttga cggacaattt tgggaccaac 660  
 tgaaaatatac aaatctataa gtcgtaagga cttantggat tatataacca cacattataa 720  
 ggggccaaga atagtgttg cttgctgctg gangtgttnc catgatgaat tgcttgctta 780

<210> 438

<211> 872

<212> DNA

<213> Homo sapiens

<400> 438

gataaatcta tgctagaggg tataaaagaa acacaaaaat agaggatatgc catgtataag 60  
 acccaacata ataaatagtt ctaccaaatt aatttataaa ttcaaagcaa tttcatataa 120  
 ccacagtaaa gcttttttaa tggatgtaat aacctgatta taacattaat ctgaaagtca 180  
 tcaggcataa agcaattttg attacatctc aaaacaatcc atggagttag ggtaaattgt 240  
 ctgttcacac aggaataatc acaggatatag aaccgagAAC ctaggaacag agcaatgtat 300  
 atatatatgt atttaaaaaa tggcatcaca agtcagtaga gaagggtttg aactattcag 360  
 taaatgatgt tgaggttatt tactactttt tcttatttca tatcatggat gaaaaaaatc 420  
 aagatgaatt aaacatggaa attaaaaata actagaagaa aatactggaa aaaaattgta 480  
 ataaatgtgt aagaaaggca tccccacca agacacaaaa cccagtagcc atgaaaaaaa 540

agatagattt gactacattt ttaaaaagta aaacctttca ctttttacia aactttgata 600  
 aaattagatt tcataaataa aggagtggga aaatacatgt aatagaacag aagatttaag 660  
 ataataataa gaggacctac aaacacaaaa attggacaaa ggctataaaa atattttata 720  
 aataagaaat acagactata aacataaact ttcaacctcg tagcaatcag gaaaattaaa 780  
 ggtaaaatga gatactattt ttcaatactt ggaaatggca gatttttaaag attggtgata 840  
 gtgccggaga tatgtgagga aagagtntct cc 872

<210> 439

<211> 863

<212> DNA

<213> Homo sapiens

<400> 439

cataattttc tatctatggt acccttggct tctgcctggc ttctgaggct tagggaaggg 60  
 aggaagggac ctacaaagag ccagggtaca cctgcctctt gtgctgaggg cacgtgccag 120  
 cttctctgcc agtaagcctt ttgctagcta acatttccca cctcccaag gcccctaacc 180  
 tgccctcccc tctccactat gttagtatat ctacctctgt ttctgactct gaggaagggt 240  
 caggccacac ggagggaaca gtagtgggta ccagcctccc ctctgctgtc cagtccacca 300  
 catcaatctc ttcctcttca gagctggcag gaagtgagcc tagtagttca gagtgaccag 360  
 atacctcctt gcctgccttg ggagaagggt ataataactc atctgtagtc aaggagactt 420  
 ccagcccagt ctccaccag tttagcagg gaggtgagag gtccccataa gacctctggg 480  
 gagtatcaag ggagctgaca tggagaagtt tgtcttcctg accatccagt ggctgggagc 540  
 tggtaatctc aaggtctggt gtccaacggc ctctactga aagcacttca ctacctcag 600  
 agggcatgac aagggggcta aggagctcag ttggccctct gtctcacca gcaggttctt 660  
 tttccaattc tgtgagctcc ctgggccaga gttccatgtc tggtagacac cattcttccc 720  
 ttcaatccag tctttcctgg ttctgcagat ggtaggtagg cgttctgcaa cccttaaccc 780  
 cctggaactn ttcaaaagac ccttataggg ngggttcaat ggtctgaacc cccagaaccn 840  
 tgaaagtcca ggatcttctt tca 863

<210> 440

<211> 640

<212> DNA

<213> Homo sapiens

<400> 440

```

atccatggca cggagcggcg gcggcggcgg cagcaggagc ccggcgcgat ccgctaggtc   60
ccagcccagc gcccagcgag caggcgacgc ggagggggccg ggcctccagt gtcccagagg   120
ccgggcgctg agactccggc cgcgcagctg ggagctgccc gcgctgcgct gacagccgcg   180
ccgacgtcct ccccgccggg gcgctcgcag gacatgcccc cggggcgcgg cggcggggac   240
cccggggctc gcctccgccc agggccccc tccacgccct cgggagcccc gggccccgc   300
tgagcactcc tcccgcacgc ctgggtccct ccggccggng cgcagcccgg ccccagcgct   360
gtgggtcccc gcggggcgat gggttgatgg gcgccggggg acgcaggatg cggggggcgc   420
ccngcgcct gctgctgccg ctgctgccgt ggctcctgct gtcctggcg cccgaggctc   480
ggggcgcgcc cggctgcccg ctatccatcc gcagctgcaa gtgctcgggg gagcggccca   540
aggggctgag cggcggcgtc cctggcccgg nttggcgga ggtggtgtgc agcggngggg   600
acctcccga gcctcccga cccggncttc tgcctaacgg                               640

```

<210> 441

<211> 823

<212> DNA

<213> Homo sapiens

<400> 441

```

cctcagtgtg ggagtgatct gaagcaggac aagctcagcc tgcagctgcc gtgggctttg   60
tgtggactgg acgcagagct tgggagacgg gggagggcta ttactccaat tcaactgtcaa   120
tggaattaca gctatagcgg cagtgtatat aggattgctt tttctcgtct tcctgggttc   180
tgaagtaacg gaagctacct tgtataaaga cctcaacact gctgaccatg atcagcgcag   240
cctggagcat cttcctcacc gggactaaaa ttgggctggt ctttcaagta gcaccttat   300

```

cagttatggc taaatcctgt ccatctgtgt gtcgctgcga tgcgggtttc atttactgta 360  
 atgatcgttt tctgacatcc attccaacag gaataccaga ggatgctaca actctctacc 420  
 ttcagaacaa ccaaataaat aatgctggga ttccttcaga ttigaaaaac ttgctgaaag 480  
 tagaaagaat atacctatac cacaacagtt tagatgaatt tcctaccaac ctcccaaagt 540  
 atgtaaaaga gttacatttg caagaaaata acataaggac tatcacttat gattcacttt 600  
 caaaaattcc ctatctggaa gaattacatt tagatgacaa ctctgtctct gcagtttagca 660  
 tagaagaggg agcattccga gacagcaact atcttcgact gcttttcctg tcccgtaatc 720  
 accttagcac aattccctgg ggtttgncca ggactattga agactacgct tggatgataa 780  
 tcgcatatnc cctatttcat caccatctnt tcaaggctca cta 823

<210> 442

<211> 852

<212> DNA

<213> Homo sapiens

<400> 442

cattccaaat ggtcaacatt ggctcaacac tgagtgcaga gaaaaggcag aagaaaacca 60  
 aagggcagaa ctgatagctt caggtcagtc tgagtgcaga atgaaagact cagctgtttt 120  
 tattatttcc agcttggtga ccttgctata cattcacaga agtttgaact tttctagata 180  
 atcagcaaaa caaagcaaga tgagaagaga gtttgaaggg tttgtttagg ctccctcttg 240  
 tagacttaga gcagcagttt caaaattcag ttccagcagc atcaggtcac ctgggaacgt 300  
 gttagaaatg cagattcttg tgccccattc aggcctactg aaccagaaac tggagagtgg 360  
 ggcccaggaa tctgtgggct aatttttttt taatgttgta gttatatata taaaacatag 420  
 cattttctat tttaactgta gaattcagtg acattcacag tgttttacaa ccataaccac 480  
 tatctgtttc caaaactttt tcatcacccc aaacagaacc tttgtaatta ttaagcaata 540  
 attcctcact cctccaatc ccagcccca gataacctct aatctccttc tgtctctatg 600  
 aatttgtcta ttctagatgt tatgtacaag tggaattatg tggccttttt agtctggttt 660  
 attttgcta gcagaatgtt ttcaagggtc ctacatgttt tagtatatag caatacttcg 720  
 atacttttta tggctgaata atattccatt gnatggctat accatggttt gggtatccat 780

tcattctggtg atggatgctt ggggtggtt cacccttgg ctattgggga ataatgctga 840  
aatgaacact gc 852

<210> 443

<211> 834

<212> DNA

<213> Homo sapiens

<400> 443

agggcaatac agtttttcta aaattttaca aaaattggac tccccccatt gaaacactgt 60  
actttgaaag aaacttcaaa ttcagcatat tttttaaaaa tctggatgat gactcgtttt 120  
ctttctttca aaccttttaa ttncgacaac atttagctta aggcaaattt tatctttggt 180  
atagctatatt cagaacagct tttaaaatgc aatttaaaaa atggcattta gcaagcaatt 240  
gccttttcaa ccttaaccat agagcctctt ccatggattc cattatattt tattaacata 300  
agttaaaata ggagtgttct gggtttcaca aggattaaag ttcctatcta atgtgcatgt 360  
aactaaacgc acgtttacgt acataatagc tattgggtcac agtttgatg atggtctttc 420  
agccagaaaa cagggtgca gttcttacag tagtccttga ataatgacgt tacattcaac 480  
gtcttttcat tattgggtta tgagaaaaaa atttgattcc aggtgggtgc cctgtctgt 540  
gtggaatttg cacattctcc tcaagtctgt ttgggttttc tctggatact acagttttct 600  
cccacatccc aaacacacgc atcgcatgtt aggtttatcg gcttgtttaa atggtcctac 660  
tttgagcaa gtgcgtgtg tgtgtgtgtg tgtgtgtgtg tngtgtgtg tgtgtgtgtg 720  
tgtagtgca ccctgcgaag gggatggcat cctggccagg gttgggncct cctttggccc 780  
tgagcttttg ggatgggctc tggcaaccct taagnctgac tgggaatang cagt 834

<210> 444

<211> 634

<212> DNA

<213> Homo sapiens



<400> 444

```

gtaggattc ctggttttaa actagagaaa agaacatgta tcaagaaaat cataaggaag 60
agaaaacaca ttacagtac tgtactgtat ttattggtac catacattta tgttgctgtt 120
tacaagatga agcatctgtc tgaaatggcc agcagctaca gctgtaccta tctactgtac 180
atatcaagca agtcacttta ttcttataat gtctatgact tctctctttg aaagcgcttc 240
catcatcact gttggcactt catatgggtc tcatgggtgtt aaggtttacg gcattgcact 300
agacacaatg aaaactacac aagagggccg ggcacggtgg ctcacgcctg taatcccagc 360
actttgggag gccgaggcgg gcggatcatg aggtcaggag attgagacca tcctggctaa 420
cacagtgaia cctgtctct attaaaaata aaaaaattag ccaggcatgg tggcacgtgc 480
ctgtaatccc agctaatcgg gaggtgagg caggagaatc gctttttccc agaaggcgta 540
ggttgacgtg agccgagatc gtgccactgc actccagcct ggatgataga gggagactct 600
gtcgcaaaaa aaaaagaana gaanaagaan agaa 634

```

<210> 445

<211> 852

<212> DNA

<213> Homo sapiens

<400> 445

```

gacccctttg gttctgttcc ttccatttct cattcaggca agttacacat gtaacatcat 60
cactgtcaca aataaaacac acaagaacaa cagcaaaatc ttataaagtg gaagtaagac 120
tctgatgtta gttagctaca gaaagtagaa aatattttta cctttagcca tctactctt 180
cttaatgatg ttctttgcat tgagttatta ttcagttgta tctttgcca catagaaaaa 240
tgctgattta cacaatagaa acataactgc ttcttttcat ctttattatt ggatactgtt 300
gaaaaaaata tttaaagata tttttatact tggcttttgc ttaaaaattt gatattttcc 360
tagtttgtag atgctctctt gtagatgcat tttaaaagta ttaatagttt tgtatttgct 420
acaatcactt tgttttactc ttgtcttctt atatccctct tttgatttca attcagaatt 480
caaatattga tgtttttcac tggtaaaaat tttcagtaat aatttcaaatt taccagttta 540
acacttgga gatactagga tggaatagga tcgtgcattg gcataaatga attttcatgt 600

```

atgtatggtt atagtggaaa aaaagagttt taatcttggc aaagggaaat atgttagaag 660  
 aagttatgct ttattagaag gtaaaagttc gatataattca tggtaactgt cggccatggt 720  
 cttcagttct ggtccttttg gttctcactc aggcaagtta catatgtaac accatttgaa 780  
 aactacngaa ttaccaccaa aggaaaaact tacaaatgta aagnccaaag aagaattgag 840  
 ggtaaaggat tc 852

<210> 446

<211> 853

<212> DNA

<213> Homo sapiens

<400> 446

gaagcacatc tggacagctg tgcggcctcc ttgcgggccg acgtcagccg agcacgtccc 60  
 ccacgtcctc tccttctcgc cacttattat ttattcgttt tcccaaagaa gcgactaggg 120  
 acccaagttt aaaaattcct cccccactc aatgcgagac gtggccagat cccatccaac 180  
 acacggttta attttcatgg ggctctggga tcaaaagaac agaaacagca acaacaaaag 240  
 cccagccgct gtctgatttt aagctggcaa agtgggaaaa ataaagtgtt gagtaaacag 300  
 accaagttgg atcatgggga atttcagagg tcatgccctc cctggaacct tcttttttat 360  
 tattggctct tgggtggtgta caaagagtat tctgaagtat atctgcaaaa agcaaaagcg 420  
 aacctgctat cttggttcca aaacattatt ctatcgattg gaaattttgg agggaattac 480  
 aatagttggc atggctttta ctggcatggc tggggagcag ttatttcctg gagggcccca 540  
 tctgatgtta tatgactata aacaaggtca ctggaatcaa ctctgggct ggcatcattt 600  
 caccatgtat ttcttctttg ggctgttggg tgtggcagat atcttatgtt tcaccatcag 660  
 ttcacttnc tngtccttaa ccaagttaat ggtgtcaaat gccttatttg tggaggcctt 720  
 tatcttctac aaccacactc atggccggga aatgcttggga catctttgng caccaactgc 780  
 ttgggtttgg gccgctttct gacaggncct ggtggctttc taaagttcct tggtcggaca 840  
 atggactttt gga 853

<210> 447

<211> 851

<212> DNA

<213> Homo sapiens

<400> 447

```

ggtaatcctt gaaatattta aattataggt cacatttgaa attctgctta gccgtttgta   60
tgtaacttgg taagaactaa atgaattacc gcattttact caggttggtt tcttgaggta  120
ataacattat agattttgta aaaagagaaa aaagtattag aattatctta acattaggct  180
tccctaagta ctctttctga gttaaccaat tgctttttaa attatagctt tatcagctac  240
ccctctaaaa atcatgcttc agtagatttt tttatagggt gtacagttct atactttgaa  300
aagctcctgg aataattatg atattgcaaa cagattttat cataacactt ttcattagtt  360
ttgccatatg cacgtccttt gttttatcct atgacatgtt tcagaattct tttattgagt  420
tctttgtgaa attttcctta aaactttcct atgcagatga tcacaaatca tatttgagtt  480
taaatacaag tttgtttggt tgtttgttta gagacggggt cttgctgtgc tgcccaggct  540
agtcttgaac tccggggctc aagcaatcct cccacctcag ccttccaaag tgttgagatt  600
acaggcatga gccaccacac cctagcctaa ctacaagtat tttgacagg tgattttgaa  660
atittggggg agctaattgca agtaaaactac tttacttggt gacatttgac actctaaatt  720
ttaactggca aatacttttag atatggacca agaagatgca ttaatttgct ttgaagaaca  780
cattcgggct ttanaaaagg aggaagaaga agaaaacccg aagagttgct gagagaaagg  840
agacnaccgc n                                                                851

```

<210> 448

<211> 687

<212> DNA

<213> Homo sapiens

<400> 448

```

acttgctttt tctcccgtt tgtaattgta ggagaaaacc aaagaactag cagagaagca   60
ggcgcaactg agcccatctc gctggccagc tgcgcatgg ctgatctggt tccagacttg  120

```

cagcccatc ttttctggat gtctaactcc atcgagctcc tgtactttat ccagcagaaa 180  
 tgcccactct acatgcagag catggaggag cagctggaca tcacaggctc gaaggaatcg 240  
 ctgttctcct gcacgctgac ggccagcgag gaggccatgg cggctgctgga ggaggtagtg 300  
 ctgtacgcct tccagcagtg cgtctactat gtctccaagt ccctgtacat ctgcctcccg 360  
 gcactcctgg agtgcccgcc attccagacg gagcgccgtg agagctggtc ctcggccccc 420  
 gaactgcccg aggagctgcg ccgctgtgtg tctgtgtacc aggagccct ggacctcctg 480  
 cggcagctgc aggtgcaccc cgaggtggcc tcgcagatgc tcgcctacct cttcttcttc 540  
 tccgggacac tgcttctcaa ccagctcctc gacaggggcc cctccctgag ctgcttcact 600  
 ggcccagagg tgtccaggcc tgcgcccgtc gcagcagctn ctggagtgga tgcngagcgc 660  
 cngcttcggg gcggctggag agcactt 687

<210> 449

<211> 874

<212> DNA

<213> Homo sapiens

<400> 449

ccaatatgag gaggaagact ccgtaaatcc aacaaacagg agaattagca ccaaaagaac 60  
 ttaagatctt aacagaatgg tttcaaagaa aatgtagtat atgaagtcaa aagctcaatg 120  
 gacttgctaa atagcaaatt agttaaatt caatgaataa gttaaaaaca gcttaagaaa 180  
 agaattagcg tttgaggctg ccatgagcct caaacatcca gccttttatt tctctgtagc 240  
 ataaagagat aaaaaaagta gaaaaaatta taggaagggtt aaatattgga ggactgaatg 300  
 agaaagtccc acatacatct cataaggaat ctagaacaag agagaaaata agaaaactaa 360  
 tttcaaatg aaaatagatg agaattttcc agaaattcaa tttcattcct caaattaaag 420  
 aagcacaaca catccccagc aagttaaata aaaataaatc cacagacatc tccagtgaat 480  
 ctcaatacca aattcaaaga tacaatctta aaagaaccaa agattaccta gtatgaatgc 540  
 agactggcat catgtttttt gcaacatcag gggccagatg acaatggaat aaagtaatat 600  
 ctttgaagta atgagaaaaa atatcaatct agaattctat acccacctta gctattttta 660  
 agagtaaggg taaaataaaa tttcactctt gcagaaagga cacccaactc tagagttaga 720

aaaccggtaa cccaaaaatt aaggtgggac tcaaaggact aaaaatatgg ttggtaaaat 780  
 cttaaatacag caatggactg cntaaaacca cnttaatag gttaacctta aggaagttgg 840  
 ttaaggataa anggtaaaaa tactaggcca ataa 874

<210> 450

<211> 746

<212> DNA

<213> Homo sapiens

<400> 450

acagctaggg ctgctcagta actgccccaa ccactaccac gtccccaaagt gcaacggggac 60  
 ccacggaact acaggtgtgg ggcagggtga gcgtggaaga agggacgcgg atgggggtgc 120  
 gctttgcaga cgatctggag actgctgtgt gttgaggga gatacgaagt cgcgggagca 180  
 gttggggact caatgtgtgg gcaacaaggg tcctgctgag ctcaggagct gcacggaatg 240  
 gtggcagtca ccttgccagt gcagcaggca tggatcagac tgcaagctag gggcacgagg 300  
 catcagttgg gaagagggga cgcacagcta ggcttgaggc ctcttcacg ggatgtcccc 360  
 aggcccccca gcccaggccc agcataaagg ccgtgttggg gggccccct gacccaaggg 420  
 gggcttcacg cgccacgtgc aggcggagcc gtctccatcc tcagagccgg aggctggccc 480  
 ttcacagcct ccagtcaggc agggggccct ccagggtggc ctgctcatgg gctacagccc 540  
 atcagggggg gcgacatccc ccggggtcta ccaggtatcc atcttttccc ctncggctgg 600  
 tacctctgag cctcataggg ccctgaaacg acaagcccca tccacttgag ggttccccgg 660  
 gagcttaaaa aaagcccttg ggcttggggg gccanaanaa gggacttacc ccccttgga 720  
 gaaaccntt ttacttgggg gggctt 746

<210> 451

<211> 787

<212> DNA

<213> Homo sapiens

<400> 451

```

aggagcttgc agtagcgggc ggcagagctg gagtgaaggg agctagtgtt taggtagcag   60
tcaccattat gctcaaagcg gtgacctga ttggaggccc tcaaaaggga actcgcttca  120
gacctttgtc ttttgaggtg cccaaacat tgtttcctgt ggcaggggtc cctatgatcc  180
aacaccatat tgaagcctgt gccaggtcc ctggaatgca ggagattctg ctcatgtgct  240
tctaccaacc tgatgagccc ctacccagt tctagaagc cgcccagcag gaggtttaacc  300
ttcagtcag gtacctgcag gaatttgccc ccctaggcac aggggggtgtt ctttaccatt  360
ttcgagacca gatcctggct gggagccccg aggcattctt cgtgctcaat gctgatgtct  420
actccgactt ccccttgagt gctatgttgg aagcccaccg acgccagcgt caccctttct  480
tactccttgg cactacggct aacaggacgc aatccctcaa ctacggctgc atcggtgaga  540
atccacagac acacgaggta ttgcactatg tggagaaacc cagcacattt atcagtgaca  600
tcatcaactg cggcatctac ctcttttctc ctgaagcctt gaagcctctt cgggatgtct  660
tccagcgtaa tcagcaggat gggcaattgg aggactcacc agcttgtggc caggggcang  720
taccatccgc tagacaggat gtgtttcagc ctgcaggcan gncagatta cgtgcatcta  780
ctgatgg

```

787

<210> 452

<211> 784

<212> DNA

<213> Homo sapiens

<400> 452

```

atattattcc tgcttacaag gcagtcttca gcatgtgtat gtccatgtgg tcattcaggg   60
atccaggctc cttgtgtttt ctggctccac ctacccctag ttctaatca tcatccatat  120
ccacctgatg gaatagaaaa tagcgtgagg tgtgttccca ggaggctttg catgggttag  180
acctggaagg caaacacatc acgtctgctt atgttccatc tggaaaaaca tttgagttgc  240
cacagcaaat tgctagttag aatgagagat ggagttccct gtgtctccaa gaagggtatg  300
actttggcag agcagctctt ctgttccctg acttctcttt ctctgccag aaccagcac  360
cgagagggac catcagagga tgttccatga gaacttggtg agggttgtgg agaggttggc  420

```

tggtgcttct ccgtcttcat acagatgtcc agacagggga ccagaagtct caggtctgag 480  
 ctctacctgg aagccctca cgtctgtagc catcaaact ccagataaga cgagccctga 540  
 agcattttgg ttgcatcaga aaacagatgg aaggccagtc ttcacagatg catatacttc 600  
 atcctggcct ccacccacag aggttgcac tgtgcagaaa ttcattccag agcaccaggc 660  
 aggtgggtgt caactcctgc tgagatttcg ctgtatcang aaactcatgc atctgggtgca 720  
 gatgtcccgg agtggctctg acagtccang gcttgggcag tggganacct gatgacagcc 780  
 ttga 784

<210> 453

<211> 851

<212> DNA

<213> Homo sapiens

<400> 453

acaccaagct gaagcggctg gagatcacgc cggtaggtgt caatgtggaa caagtctgca 60  
 tcctgagggg actgggcgcc atccagccag gagtgaaccg ctgcaaactc atctccagga 120  
 aggacttga gaccctctac aatgactgca ccaacgcaag ttctagacct ggaaggcctc 180  
 ctaagaggac tcaaagtgtc acctccccag agaactctca catcatgccg cattctgtcc 240  
 ctggtctcat gtctcctggg ataattccac caacaggtct gacagcagcc gctgcagcag 300  
 ctgctgtctgc taccaatgca gctattgtg aagcaatgaa ggtgaaaaaa atcaaattag 360  
 aagccatgag caactatcat gccagtaata accaactatg agcagactct gaaaacgggg 420  
 acatgaattc aagtgtcgga ctggaacttc cttttatgat gatgccccac cctctaattc 480  
 ctgtcagcct acctccagca tctgtcacca tggcaatgag ccagatgaac cacctcagca 540  
 ccattgcaaa tatggcagca gcagcacaag ttcagagtcc cccatccaga gttgagacat 600  
 cagttattaa ggagcgtgtt cctgatagcc cctcacctgc cccctctctg gaggagggga 660  
 gaaggcctgg cagtcacca tcatcacatc gcagcagcag cgtgtccagc tcccctgtc 720  
 ggactgagag ctcttctgac agaatcccgg tccatcagna atgggttgtc catgaaccag 780  
 atgcttgatg ggcttatcac caaatggact ttctgggccc aaagaaggag atttggccgt 840  
 catgacatgg n 851

<210> 454

<211> 526

<212> DNA

<213> Homo sapiens

<400> 454

```

tttttgtttt gttttaactt ccccttgttt caagacaatg ctaaggaact ttaaaattgt   60
agcagttcat atttgctggg ctcttactgt gtagtggcag gggttgtaatt gcgttaccta  120
tattaactca gtcaatcctt acaacagccc tatatgactg gcataattat acccttgttt  180
tgtgcatgag gaaatacagg gaattgacat actggatggc agggctggga ctcaaggaca  240
gtctgactct ggagcacagc tcttttgttt ttctttttt cttttttctt tgtgtttgtg  300
tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtaggagag agagacagag  360
tctcgctgtt gcctaggctg gaggtgcagt agctcaatct tggctcactg caacctccac  420
ctcccaggtt caagggattc tctgcctca cctcccccag tagttgggat tacaggcgtg  480
tgccaccacc cccagctgac tttttgtgtg tgtatgtgta tgtnnn                    526

```

<210> 455

<211> 845

<212> DNA

<213> Homo sapiens

<400> 455

```

cctcctgaaa atgaaaagaa ggtagaggaa gatattatca cagagcttgc tcttggagaa   60
gatgctatat ctagcagtat ggaaattgac caaggtgaaa agaatgaaga tgaaacttct  120
gcagatcttg tagaaacgat taatgaaaat gttattgaag ataacaaaag tgagaatatc  180
ttagaaaata cagactctat ggagacagat gaaatcattc ctattttgga aaagcttgca  240
ccttctgagg atgaacttac ttgcttttct aaaacatctc tccttccaat cgatgagaca  300
aatccagatt tggaagagaa aatggaaagt tcttttgggt caccatctaa acaagaaagt  360

```



agtgagagtt tgccaaaaga agcctttctg gtcctctctg atgaagagga tatttcgggt 420  
 gaaaaagatg agtctgaagt tatatcgcaa aatgaaacgt gctctccagg ttagcatata 480  
 acttaaagt taaagatttt ttattgactt tgatgaactg ttttaataaaa cattatcata 540  
 atgttttaaa tttatttttag ctgcagagaa agttgagaat agtgatgact ctatagaaag 600  
 atgtcttaac ttcatagaat tcagaattag tgtgtgtact ctgtgagtag cattgtctaa 660  
 atactaagaa gggagataaa atnagtagaa aatatgccct tatagtctgg aaatagagat 720  
 gaagtanagc accatacact gagatacagc ttaagttagt acataattga ctagagttgt 780  
 acagttcttt ctgctatca cttanccaac aaatnactta gaactaaaag cctaatagtt 840  
 taatn 845

<210> 456

<211> 794

<212> DNA

<213> Homo sapiens

<400> 456

aaggcgcgga agcggcggta gctgcagctg gcgaagttgg gcgactggcg gatgcaggcc 60  
 ttgcggcacg tcgtgtgcgc cctgtccggc ggcggtggaca gcgccgtggc cgcgctgctg 120  
 ctgaggcgga gaggttacca ggtgacaggg gtgtttatga agaactggga ctcactggat 180  
 gaacatgggg tctgtactgc cgacaaagac tgtgaagatg cttacagagt ttgccagatc 240  
 ttagacatcc ctttccatca agtgtcctac gtaaaggagt attggaatga tgtgttcagt 300  
 gactttttga atgagtatga aaaaggaagg actcccaatc ctgacatagt ttgcaacaag 360  
 cacatcaaat ttagttgctt ttttcattat gctgtggata atcttggggc agatgccatt 420  
 gccacaggtc actatgcaag aacttccctg gaagatgaag aagtccttga gcagaagcac 480  
 gttaagaagc ccgaagggtt tttcagaaat cggtttgaag ttagaaatgc caggtttccc 540  
 aggatgccct gaggagaacc atcttccctc tggggggatt aacgaaagag tttgtaaaga 600  
 aaatcgctgc tgagaataga cttcatcatg tgcttcagaa gaaagagagc atgggcatgt 660  
 gtttcatcgg gaagaggaat tttgaacatt tccttcttca gtatctgcag cctngacctg 720  
 gcactttatt tncatagaag acaataaggg tctgggaaca cataaaggtt gggtcctgna 780

taccttgggc caga

794

<210> 457

<211> 846

<212> DNA

<213> Homo sapiens

<400> 457

aatccattaa tctgatgcta tgatgacctt ggaaataatg tactttttaa aaatataccta	60
aagtcctatg acttaaagtt cacattatct tccttcataa atgaaaaatt ttcattttaa	120
acatggaatc agtttatcaa agtacagttt acaggtttta agtctgttcc atttctggtt	180
agacaaactc aaatacaatg atcaaaactaa aagatttctt aaaagtatga tgactattaa	240
ttgtctgcta atgaagtctg aaggctctgat aagattatcc atgaagcaaa agggaggaac	300
aaaaaaactg ttacatttct ttcttctaata ttttgagcct aaaaaccatt ttttataaac	360
gtggtttcat tgttctgaca tcttaggtgt ggcagttctc tgcctcaaga aaatttgtaa	420
aatttatatt ttagatttta gcataatttc tgaacaaaac aataacaact acttaccagt	480
ttttactgta gatactggac ttgacctctt aggggtgaata cttgtttgac ttcaagcggg	540
gagagtatac tttttaacca atgacttgct gattttgcag ttaagaaaga aaaacagaat	600
ccactgaaaa taaaatttct atttgaaagt ttcataagtg taattgacta acggtgagtc	660
ctccccagc tgttactggt atttcaatgt ttaagaaatt attttattta cactaaatag	720
tctcaacaat tccctatctt atactggcag gcaggaaact gnagangttg tatcaactgc	780
agtttgcact gaaagaaaac aatcttaaata cacttttaata cttgcagagc atttttgtaa	840
ggtcaa	846

<210> 458

<211> 425

<212> DNA

<213> Homo sapiens

<400> 458

```

acccacgctg cgggcaagcc atggcgggaa gcgagccgcg cagcgggaaca aactcgccgc 60
cgccgccctt cagcgactgg ggccgcctgg aggcggtcat cctcagcggc tggaagacct 120
tctggcagtc agtgagcaag gagaggggtgg cgcgtacgac ctacagggag gaggtggatg 180
aggcggccag caccctgacg cggntgccgg tgagcgtcgg ccgcaggccg nggaggacag 240
tggggccggc ccgggcccga gggacctccc ctggagcccc ccggggcctg gggaactctc 300
gcgccccggc ctgggtctgg ctccgtccat gcagccattc ctggcagagt agtcaccgag 360
aagctacagt tgatcagaag cgtcttggct tggaccctgg tgcttcgnan ggggcccga 420
catnt 425

```

<210> 459

<211> 868

<212> DNA

<213> Homo sapiens

<400> 459

```

ttcagaatca taaaaacatt tttaaaagga attgagaaaa aaaaaacctc aaagaagata 60
ccatatgagt atggtagtaa tacccaaaga taaccaaagc aatggaacaa aataaat ttt 120
ataatgagaa attttaatcc ttgttatatt taaccattt gttcattcaa tgctgttata 180
cattcccttt gttgtgggtt gaatctagga aaagggtctt gtccaatata attaaggatc 240
tcaagatgaa gcatcctgta tcgtcacggg tacgtcctaa atccaatgac aagtgttctt 300
ataaaagaca agagaaggca caaagacaaa gaaaaagcca cgtgaaacac aatagaaggc 360
ataaataaaa agccacgtga aagcaaaggc agaaactaga gcaatgcagc tacaagaat 420
gctgacagct accaaaagct gaaaaagaca agaaaccatt ctctctctt gtcttcagag 480
ggattgtggc cctgccaaac ccttgatttt gtacttctgt cctccagaac catgacagaa 540
tgaatttctg ttattttaag ccaagtaggt ggtacagcag ccacgggaaa ctaatatatg 600
tggtttgctt tatatttatg ttggacagca ttctcttaga tcctacaacc aattcacaga 660
aaacacaggg ctgaggaacc agttaaactt caccagggaa tacagttcac aaaatttagc 720
ccatgggaaa ttccacagag taaactatct aatctncaca aataaattga aatggaagcc 780

```

ttctatggat gaaaagagac ttagacntat caaccagtca caaccagntt tggaaccctg 840  
attaaaacca aaatggtaaa aaaaaaac 868

<210> 460

<211> 819

<212> DNA

<213> Homo sapiens

<400> 460

gtggttaaac gtacaatttg gggggcctca tccccaaat ttatttgaat ggagcagagg 60  
ggggttgtca tctttacatt ttcaaagtag cagtcctggg gctgagactg attaatgtaa 120  
ccactacatt gagaattact ggtctaacat aaaagtgtc aagatgttga aacaagtgac 180  
accttgtgcc gttgatttcc ttcccttttc cagagctgtg ttggtggtgt atctcaaact 240  
aaaggaggta acagaatgga ctcttaggac gaacctgatt tagttagagt ttccactccc 300  
atcttgaact agtgggtataa tgtaggaaag cagttctcaa agtgtggaca gatgacccat 360  
ggggatctcc tcttaccctt tcagggtagc ctcaaggta taactatattt caaaataata 420  
gtaagatgct atttattgtt ttcactgata cactgatggt tcaaaagcaa ggctgggtaa 480  
aactactggc ggtaccttag cacaaagcaa gtcaggggca ccaaactact tgagaatgcc 540  
cttgaagcag taaaatttat tattctattt ttattttttt gaggcggagt ttgtctctgt 600  
cgcccagggt ggagtgacgt ggcactatct cggtcactg caatctcttc ctccctgggt 660  
gtatttttag tagagacagt gtttcgccat gttggccang ctggtctcga actccggacc 720  
tcangcgate cacctgcctc ggcgccccaa agtgcctggga ttacaggcat gagccaccgt 780  
gcccggncat ttattattaa gcttancctt tgactactg 819

<210> 461

<211> 415

<212> DNA

<213> Homo sapiens

<400> 461

tgtttaatct gatgaatgtg gctttttttc ccttcacttt aatgttcaag aagttgtggc	60
tatttcatag atttcttctg atttattctg tgggtccctg ttatctgttc tttatgtaat	120
ctttcagtag attttcatcc ttttatatcc acattcttat gtggacttgc tgaagaaaca	180
gaatatcagt tcaaaacaaa acctaggcca ggcatgggtg ttcgcgcta taatctcagc	240
actttgggaa gccaaaggcg tcaggagttt gagaccagcc tgaccaacat gatgaaaccc	300
tgtctctact aaaaatacaa aaattagcct ggctgtgtg cagcatctg taatcccaac	360
tactcaggac gctgaggcag gagagtcgct tgaaccang aggcgganat tgcan	415

<210> 462

<211> 856

<212> DNA

<213> Homo sapiens

<400> 462

atgtagcccg gtccgtgccg caaagcgaac ggccggccgcg gcgcgggccc cgcgggggtt	60
agagtcacca cgcccagccc acagatgtca ctctgcctt tccattatta ctcagttttc	120
tgaatgccag ttgcttctag catagtgcct gctctagaga ggcactcagg aaccaaggcc	180
tatctttctg tgttggtcca ctctacacct aagttgctgt gatggagcca tgtggtcggg	240
gtcagggttc ccaactgcact ttctgcagt ctcccagaac tcagtatgta ctgggaaggg	300
cctgctgtcg tgacagcctc tctttggggc cagcttctgc ttttgcccc atctttgcag	360
tacagggggt aaattaacaa agaggatgcc tgaatgaacg atatcctggg ttcttgagag	420
acaagtggga gctgataatt ctgaaaattc attagtcaaa gcatggagat aaaggtggca	480
gcaggaaggg gagaggcaag gagtagacc gtgacagttt tagaatctta tttgtgcca	540
aatactttac tgcattggct tggacctcta atacaatgtt gaattgttaa ccatgatagc	600
actgtatcct ggtctaattc ctgaattgaa tggctagtct taccattaag aatgctat	660
gcggccaggc acggtggctc acacctgtaa cccaccact ttgggaggcc aaggcangtg	720
gatcacttga ggtcaggagt ttgagaccag cctggccaac atggtgaaac cccgtctcta	780
ctaaaaatag aaaaattaac ccgtgtgtgt ggccggcgcc tgtaatccaa ctgctctgga	840

ntctgangca aaanaa

856

<210> 463

<211> 827

<212> DNA

<213> Homo sapiens

<400> 463

```

gcgagcaaca ggccgtgccg ggtttgcatt tccttactgc tttgtcttga agacagaacg   60
atgccaaaga aagcaaagcc tacagggagt gggaaggaag aggggccggc tccctgtaag  120
cagatgaagt tagaagcagc tggggggcct tcagctttaa actttgacag tcccagtagt  180
ctctttgaaa gtttaatctc gcccatcaag acagagactt ttttcaagga attctgggag  240
cagaagcccc ttctcattca gagagatgac cctgcactgg ccacatacta tgggtccctg  300
ttcaagctaa cagatctgaa gagtctgtgc agccggggga tgtactatgg aagagatgtg  360
aatgtctgcc ggtgtgtcaa tgggaagaag aaggttttaa ataaagatgg caaagcacac  420
tttcttcagc tgagaaaaga ttttgatcag aaaagggcaa cgattcagtt tcaccaacct  480
cagagattta aggatgagct ttggaggatc caggagaagc tggaatgtta ctttagctcc  540
ttggttggct cgaatgtgta cataactccc gcaggatctc agggcctgcc gccccattat  600
gatgatgtcg aggttttcat cctgcantcg gagggagaga aacactggcg cctctaccac  660
cccactgtgc ccctggcacg agagtacagc gtggaggccg aggaaaggat cggcaggccc  720
ggatcatgag tttatgctga aaccgggtga tttgttnac tttnccagag gaaccattca  780
tcaagcggac acttctgcgg gctggccac tcgactnacg tgaccat                    827

```

<210> 464

<211> 863

<212> DNA

<213> Homo sapiens

<400> 464

aactcattga tgaagacctg tgcttgggca aagctaagaa acaagaacaa actgttgagg 60  
 agaagaagaa gatgcctatg gaaaatgaga accaccaggt attcagtaat ccaccaaaga 120  
 tccttactgt tcaagaaatg gctggattga ataacaagac aattggatat gaggggaattc 180  
 atagccctag tgtgcttcct tctggtggag aagaaagcag atcaccatct cttcaactta 240  
 agcctctgga ttccagtgtt ttacagtttt ccagtaagta caaatggatc ctaggtgaag 300  
 aaccggtgga gaaacgaaga aggctccaga atgagatgac aacaccttct ctagattatt 360  
 ccatgcctgc tccttacagg agggtagaag cacctgttgc ctaccagaa ggggagaaca 420  
 gccatgataa atcgagttct gagagaagta caccaccata ctttttccca gaataccag 480  
 aagcaagcaa gaatacaggt cagaataggg aggtttcaat tctgtatcca ggggccaaag 540  
 accaacgcca ggggtccctg cttcctgaag aattagaaga tcagatgcca agattggtgg 600  
 cagaagaatc taacagaggt agcacaacca taaacaaaga agaagtcaac aagggacctt 660  
 ttgtagctgt tgtgggtgtt gccaaaggtg ttagagattc aggagctccc attcagctga 720  
 tcccttttaa cagagangac ttgctgagag acgaaaagca gttgaatcct ggaacccaat 780  
 gccttattct gnggcctctg ctgcaatccc tgctgagcca ttggggagaa agcaagagct 840  
 ttgaggagac caaagtcata atc 863

<210> 465

<211> 858

<212> DNA

<213> Homo sapiens

<400> 465

tacacatgag cctcctccgg cagaaaatag cccagctgga ggaggagaag caggcacgca 60  
 cggccttggt ggttgagagg gacaacgcgc atcttaccat caggaacttg cagaagaagg 120  
 tggagaggct gcagaaagag ctgaacacgt gtcgagactt gcacaccgag ctcaaagcca 180  
 aactggccga caccaatgaa ctgaagatta aaactttgga acagactaaa gccattgaag 240  
 atctaaacaa atccagagac caactggaga agatgaagga gaaagctgag aaaaagctca 300  
 tgtctatcaa gtcagaactg gataccacag aacatgaggc taaggagaat aaagaaaggg 360  
 ccagaaacat gatagaagtg gtaaccagtg aaatgaagac actaaaaaaaa tctctggaag 420

aagcagaaaa gagagaaaag cagctggcag acttcaggga ggtgggtgctg cagatgctag 480  
gcttgaacgt gaccagcctt gctcttccctg attatgaaat catcaagtgt cttgaaagat 540  
tgatccattc acatcagcat cactttgtta cctgtgcctg cctcaaagat gtgactactg 600  
ggcaagagag gcacccacaa ggccatttac agcttcttca ttgaacactg tatctcttga 660  
gagagggtggc cataagacat ggacacacaat tcccaatttc acaaattcct cctgtctttg 720  
agatttgatc agttggtgaa tattttatgc ttgatgata tagtgagaat gcatcacttg 780  
caaaaacgat ctcaaaagtg tcagccttag ataacgttca catttaaaac gcctattatt 840  
catttactag cntttang 858

<210> 466

<211> 590

<212> DNA

<213> Homo sapiens

<400> 466

aatcgagtcg gccttggttg cctactgggc ggcgcttcct agttcggctg gttcttctgt 60  
cgccggcttc agcagcccg ccccgggcag gtaaggcatt ccccgctta atgcctcggt 120  
caaacgtcgt ccgaggtccg cttccaggcc ttggcacctc tgccccaggg ttgctggggt 180  
cggctgctgg aacggaaatc tctttatcat ccgtgagaaa agttnnagag gaagtggggt 240  
cctttgacag agcttactcc agaagaaaga cttgggtagg tccccggtta tcaagaagtt 300  
cntcggccct gaggaagagc ctgaggcttg gagggacgtc acccagctgt tctggggcgc 360  
agtcggacct caagtttctc acctctcagg ccctggattc cgtgaaccgc actgcgaaat 420  
gaagtctctt ttccccagaa ccagcangtc atgccagcac ctgacagatg cctgtggcgc 480  
cagcagctcg ctgagcctgc acacgattgt nattcgcttg tttctccggc ctncagctt 540  
ccaggggaatt agaaagtgga ggcngcttat gggatcagat gagtacattc 590

<210> 467

<211> 800

<212> DNA



<213> Homo sapiens

<400> 467

```
cctttgcgcg ccgggttaat gggcggtaat ttggtaccct tgggtgcact ttgttttgcc 60
cctgttcatt tgaatgcaaa tgggtgaccc gggcccgact aggtgcttat taaattgcag 120
ttttccccc tgctttttcc ggaatgcaga cttagaggag agaggctgcg ccctggccca 180
gcctggctcg gctcagctcc gcgcgccatg gcaagctcgg ctccctgga gaccatgggtg 240
ccccggcct gcccgcgcg cggagcgttg ccggccactt ccaagacact ggccttttcc 300
atcgagcgca tcatggccaa gacgtcggag ccccgtagcg ctttgagcc ccggcctgga 360
gcgctagagg cggacggcag ccagggaag aaactgctca acctctgctc gccgctgccc 420
tgtatgatcc ccctccagcc cctaggctac gaggtgccgt caaagacact gctcagttac 480
tcggagctct ggaaaagcag cctccgggcg ggcggcggcg gaggcggcgg cggcgggtggc 540
ggcggcggcg gcgnggggc ccagtggtgc ggcgccagcg gcttggtgcaa aaccaactgt 600
ggcgtgtgct gcaaggccga gctgggcctg gcgccgtccg cgcttgncgc gggcagggtc 660
atcaagccgc aagtcacaa ccaaggctgt gggctgccgg ccagcggctc gctctactac 720
tttaaactac ctggacttcg aaccngtac cccgcgtnnt gagcttcttc agcggggcac 780
ctttttncgg tcttggcctt 800
```

<210> 468

<211> 696

<212> DNA

<213> Homo sapiens

<400> 468

```
ggaacagcaa gtggcacata gtaggcacac cttttattcc tctctcatcc tgttctctac 60
tcattaagct gtccactctc ttttttgacc ttagcacatt cctaagtctc taaccttctc 120
agcctctttt tttaaagtgt cagagcccta taaaatattg ttaataaata attttaacat 180
aaaaagaggt acagatttac agatgtacat gcagtataaa atgataacct caagcatacc 240
tttctccaaa gaaaaatgtt acaaaactaa acacagttgg ctgagcttga gttgcattac 300
```

tgcataactta ggacgtgcca gcacataaca aacgtttaag gaaagtgatt acaagaagaa 360  
aagttaatat tttagacaag ttgattcagt ttttcttggg ttgtatgatg ttagaagttg 420  
actactgtct caaattggag cctgtaggcc actggngttt tataaggcac ttgattggag 480  
aactaatgct ttaaccacac cagaataatt gcattctgca nattaaatgc antgccatat 540  
gctgccaatc ccccttgcgt gtcccccggc attatcttct ttctcgacca ccactgatga 600  
gcattctaatt gcccttcaa ggccttattc agatggccct tattggagct gnttctgaat 660  
cttttttagac tcatttgggc cccttnactt aagaan 696

<210> 469

<211> 869

<212> DNA

<213> Homo sapiens

<400> 469

tacattaaaa tgcacttaat atcactttgt aaagcccaga tgagtgcaaa tgtgcctgta 60  
acttcctcct ttaatctgtc caggtagtat ttagtcttta gtcttacatt ttctttctcc 120  
ctttatttca tgaaattcct tgagaaaact tcaacagtaa agaaagaaat ttcgttcac 180  
tcacaactct tccaaacgag gaaacttagt gaaatatttc agagcttcta gatgtgaggt 240  
acaaaacttg ggatcaaatg gaatcttgat tcaactaacca atttaagatc tgacttctaa 300  
ttttaggaac tttgggttat gaacgcttcc attttatacc tgtgtctagt tagtttctgc 360  
ctatctatcc aagaagcttt tatcaagggt ccaccatgtg ccagccactg aagtagttat 420  
aaatacaagg atgtgtaagg tatggatgat ggtatacgaa ctgtcatctt actggatttg 480  
tccgctctgt taaagatacg gttccgaaaa ctttttaaag ccctagagag ggctttaagg 540  
caatgtagca tcatatatag aggcatcaac ctgttcatat ctttctatctt aacagaactg 600  
tgcacctggg cacaagggtg tgcacaacag gatgtgtaca gcagcactgt taaagtgtag 660  
cacatccata ctacaggatc ttatgcaact gttggaaaga atgaagcgat gctgcactgt 720  
ggatcatgcag tgatctctaa gacatattaa ctagaaagcc aaagggttaa caatgtatag 780  
caactgggcg caatgactng cgccctgtaa tcccagcact ttgggaaggc tgantanggg 840  
cggatcacct gaggtcagga gttttgaaa 869

<210> 470

<211> 822

<212> DNA

<213> Homo sapiens

<400> 470

```

gttatgaaga tagtctgtct tgataaaatc ccaggcttaa tttagataat gtcagtctgc   60
cacacggagt tggtagccat aaaatgctac ttctgagttc tacacttagc tgtagaatgc  120
aaattgagtg acacctttaa ggctacagta cttgattttt taacatcttt tctgttgggg  180
ctttgactag ttctgcagaa agggattggg acaaaaccag gagtttgta tttttagttt  240
ttctttgcca tttagcagca gaaattcgat cccactgat aaacagaacc tgctggacca  300
cctttgctca gataatttct ataacacaga ggtaactca ctattggttg aaataaatgc  360
ttaaactttg aagcactttt taaaaaatca taagtacacc agtgctgcac ctccaatgat  420
aatcatttag gaaacacaga aaacaaaaat taaatgaatg gtccacatgt gaataaataa  480
ccttaatcca ctcggatatg cagcagctct tccactgca aatgggtttt gtggtggtaa  540
cttgaattgg aggagagaga cagctggcct ggtgctgctg ctgctgcaa aagccatctt  600
gttaacatgg tttatttcca ttctgtcttc ctgctaccca caagagccct gtcctcctgt  660
ctcctcctc tttcatcagt ttccagtggc atactgncct cagtcacatt tctcctgctt  720
tgccagtaaa cagcatgtag ctgattcttc tagtcctcgn ctgcattcct acaattnctg  780
ctcattccga attgggtctg gtatctncta agttggtgca ct                               822
    
```

<210> 471

<211> 798

<212> DNA

<213> Homo sapiens

<400> 471

```

agcagagggg acagggaaga aacctaaagg ctgcaggctg ccagggtgtc ttggagagcc   60
    
```

cccttcttcc gccgggcctc gcaagcagcg taggactgtg gagaagggcg gtgggcaagg 120  
 agggaaactcg agagcagcct ccatgggcac acaggagggc tggcgcctgc tgctctgcct 180  
 ggctctatct ggagcagcag aaaccaagcc ccaccagca gaggggcagt ggcgggcagt 240  
 ggacgtggtc ctagactgct tcctggcgaa ggacggtgcg caccgtggag ctctcgccag 300  
 cagtgaggac agggcaaggg cctcccttgt gctgaagcag gtgccagtgc tggacgatgg 360  
 ctccctggag gacttcaccg atttccaagg gggcacactg gcccaagatg acccacctat 420  
 tatctttgag gcctcagtgg acctgggtcca gattccccag gccgaggcct tgctccatgc 480  
 tgactgcagt gggaaggagg tgacctgtga gatctcccgc tactttctcc agatgacaga 540  
 gaccactgtt aagacagcag cttaggttcat ggccaacgtg caggtctctg gacggggacc 600  
 tagcatctcc ttggtgatga agactcccag ggctcgccaag aatgangcgc tctggcaccc 660  
 gacgctgaac ttgccacttg agcccccaag ggactgtgcc gaactgcaat ggagtttcag 720  
 gtggatgaca cagaccaat cccttgagct tncctggctgg gggtccttaa gccttcnttg 780  
 gacttggggc ttnttcca 798

<210> 472

<211> 862

<212> DNA

<213> Homo sapiens

<400> 472

agtgctagct cgccgcggcc gcctccgggg accacctggc ttcattgtgtg gatttcacg 60  
 gctcttgccc agaggcgggt acactgtgtt ccaatgtgcc acggaactca cgcagtggca 120  
 ctttgtggct tcatgaagga agaggcaggc cacgcaacac ttcttcccca agccaaggag 180  
 aagtatcact tttagaggca gaggagcgga aggcagtggg tgtgaccaa agtgccattt 240  
 gttaaagctt atcttccttg ccagatttta aaaactatta tggaaaatct caagcattca 300  
 caaaagtaga gagaaagaaa ggactctcag actgttggag cagaactact gagaaaaacc 360  
 aggcatgtga tcttcagttg tcatcaagtt cgcaatcaga ttggaaaagc tcaacttgaa 420  
 gctttcttgc ctgcagtga gacagagat agatattatt cacgtaataa aaaacatggg 480  
 cttcaacctg actttccacc ttctctacaa attccgatta ctgttgctgt tgactttgtg 540

cctgacagtg gctgggtggg ccaccagtaa ctacttcgtg ggtgccattc aagagattcc 600  
 taaagcaaag gagttcatgg ctaatttcca taagaccctc attttgggga agggaaaaac 660  
 tctgactaat gaagcatcca cgaagaaggt agaacttgac aactgccctt ctgngtctcc 720  
 ttacctcaga ggccagagca agctcatttt caaaccagat ctcactttgg aagaagtcag 780  
 gcagaaaatn ccaaagtgtc cagaagccgg tatcggcctc aggaatgtaa gcttacagan 840  
 ggtcgncatc tcgttccac cg 862

<210> 473

<211> 811

<212> DNA

<213> Homo sapiens

<400> 473

cgacgctcca cagctcgccg cggccggggg gcggtgcgcg gaccgtgcgc gccgcgggcg 60  
 ccagatgtgc agtccccgcc gccgccagt accgagccgc agtccgagcg gtatcgggcc 120  
 gcctccctga tgctgcgggg gcgacctga gcgtacagcg gcttccctcg gtggggaccc 180  
 cgacatccca gcgctgtgcc cggctcttgc ctctgtagcc cggttcgccc cgcgcttgga 240  
 catggaaggg gccgccgcgc ctgtggcggg ggaccgcccc gacttggggc tgggggcgcc 300  
 gggctctccc cgagaggcgg tggcgggggc gactgcagcc ctggagccca ggaagccgca 360  
 cggggtgaag cggcatcacc acaagcaca cttgaagcac cgctacgagc tgcaggagac 420  
 cctgggcaaa ggcacctacg gcaaagtcaa gcgggccacc gagaggtttt ctggccgagt 480  
 ggttgctata aaatccgttc gtaaggaca aattaaggat gaacaagaca tggttacatc 540  
 agacgagaga ttgagatcat gtcattctc aaccatctc atatcatcag ttttatgaa 600  
 gtgtttgaga acaaagataa gattgtgatc atcatggaat atgccagcaa aggggagctg 660  
 tacgattaca tcagttagcc ggcgacgcct cagttagagg gagaccggca cttcttncgg 720  
 cagatcgtct ctgcttgtgc actattgtca caaggaacgg tggtgggtcc acccgggact 780  
 ttggaagctt gaaaaaagaa ccagtnatna a 811

<210> 474

<211> 866

<212> DNA

<213> Homo sapiens

<400> 474

```

caaatgcgta ctttctgtt tttaatttgt gtgtctccaa aaaaaagaac ctttcatact   60
tggcagcttc actactaagc tttaagccct gtatgtaatt tgttaccagc ttcctctgct  120
catccatcca ttcattcaaa aaatatttat tgaggatttg caaggggttg ggaacagagt  180
ggtgaacctt gaaggtgatg ccactgctct tggggagctc agcggtgact ctccccatat  240
atgtaaataa acatataaac agaaatgtgg ataaaccaac ttctgagcaa attaacatgt  300
atgtgattta aaagtaagat gatttgcaag agaggagcag gtgatgaagt gtaatcaaga  360
tcggcctagg atgacaggg aagcgctttt taggtgggtg acatgtgagc agaaagacct  420
gcctgaagag aagggataaa ccagcaaagg cctgggggaa gcattttaga cagagagaca  480
catggtgcag agaccatgag ctgagaagga gcctggcatg tccaggggct gacagaacac  540
tggtaatgtc acaggggtgtg gaagaactgg cataggtgag gtcagagcat atagaaagag  600
cangttgtaa gggattttgc atctcacaac gtgggccact agactattct cccttcacc  660
acccacccct atgcacacat ncaagcagtg tgataagttc tgtccattct acatacttga  720
tatctctcag atctcctctt tcccactact ttaacaggca ccatcatctt ttggcttatg  780
ctcaatgggt gcctactgac ttncctggct tctaggactt ncttcctaac catctttcat  840
aatgccaaac ttggatagnt ctaatt                                     866

```

<210> 475

<211> 864

<212> DNA

<213> Homo sapiens

<400> 475

```

atgcatggta aatttgaatt tccccattgt tctctagagc taggtcaaaa aaacaactgt   60
ttcttttctt attccactat taataaattg aaagcttgct gtacaaaggc aacagcaact  120

```

taaaaaagaa aatctggaca atagatgtgg actccaaggg gccactgcca tcccttcctg 180  
 tgtgctcttt ttgacaagta aatcactcca gttagctgat gtcctgaaat gacatttgta 240  
 cctgaggcaa ttcttattag agcttactca ggacttttca aacatcagga cacacatagc 300  
 aatttgatg ttgtaaaact acgtgttaca tttggagagg tcttggtgag aaggcaaaat 360  
 tttctaaata ttttgatata aatttgggta aagaaaggaa tacttttggtt agaattgagaa 420  
 ttaaagagaa aacaaaagaa tcttggaaca attttccctc tgaaattaca aacttttagga 480  
 acttttccag atgtatcgaa tttaatttga cattgatgtc actcttcata ccaagtgaat 540  
 ctattctcat gaactttgaa cccatgttaa ttttggaacc tataactaat ttcctttctg 600  
 tatcccatgg tggtaaaagc agtaaaggag tttagagata cttagcaaat gccattcata 660  
 tagtattgtt agccaaacta ttattccttc cttagaagtt gatgtatcag aaaatttata 720  
 agttatttgt atttatatat aagtacatca gaacttgccc acatgataac tcatggttgc 780  
 tttaataagg gaaaatatgt tatttgangg taattatatg atagtgagga acattttaca 840  
 attatttaca gngnttgaca ttaa 864

<210> 476

<211> 861

<212> DNA

<213> Homo sapiens

<400> 476

gataactgta ttatatTTTT catctagcta taaaacttta atcttactct taatatectg 60  
 gatttaattc aaactcctgt tgggttcttc acaaatgaga acttggtcaa aggatttatt 120  
 gaactggtat tgatttcact gaaaatttcc cacaccacca ccattgtttt tttgaattct 180  
 tgggtgtgtg ctccccacct tctgtccttt tcgtttgttt agagaagatg aattttttaa 240  
 aagcagataa attgctaag agcaataatg acctatctt taccaaaaca ctgaaaatta 300  
 agagaggttc agtggtgaag aagcacaata tgctgcggtg tctttttcta gaagtgaatg 360  
 gaaatcttgc tcagttggca tttcaagcag gaaatgaaat gcttgcttta atggcaaagc 420  
 agcgtaaca tttttcctgt cgtgtagcag agagtacaag aatcatttca gcaaagcagt 480  
 gactcaccat gagacgttat ctccatggag ctgcgttttg acttttccca ctctcttact 540

catagaagga ggacaaagga acgaaatgaa atcatgctca caatgaactg ttcattacat 600  
 caactgatct ctctctctct ctcttcctct ctttctcttt ctccataacc ccaaggcaaa 660  
 atttttttaa agaaatgact ttaaaaaacta tcatttctgt attttaatta catctcttag 720  
 aaataaaatt atgtttgcac catagctttc taagaaaaaa aaatgtgttt ttaactgagt 780  
 cttagtgtct tagtgctttt attgggggtat ttttagactg tattttaacc acacttccaa 840  
 ggatcatgtt cattgcctta c 861

<210> 477

<211> 866

<212> DNA

<213> Homo sapiens

<400> 477

tatgaaacag acgtggcaga gtaaaccctcg aaaccgacct tcttttcggc agacactcat 60  
 gcatttagac attgcctctg cagatgtact tgccaccca caagaaactt acttcaagtc 120  
 tcaggctgaa tggagagaag aagtgaataa acattttgag aagatcaaaa gtgaagggaac 180  
 ttgtatacac cggttagatg aagaactgat tcgaaggcgc agagaagagc tcaggcatgc 240  
 gctggatatt cgtgaacact atgagcggaa gcttgagcgg gcgaataatt tatacatgga 300  
 attgagtgcc atcatgctgc agctagaaat gcgggagaag gagctcatta agcgtgagca 360  
 agcagtggaa aagaagtatc ctgggacctt caaacgacac cctgttcgtc ctatcatcca 420  
 tcccaatgcc atggagaaac tcatgaaaag gaaaggagtg cctcacaat ctgggatgca 480  
 gaccaaacgg ccagacttgt tgagatcaga agggatcccc accacagaag tggctccac 540  
 tgcatccctt ttgtccgga gtcccaaaat gtccacttct agcagcaaga gccgatatcg 600  
 aagcaaacca cgccaccgcc gagggaaatag cagaggcagc catagtact ttgccgcaat 660  
 cttgaaaaac cagccagccc aggaaaattc acccatccc acttacctgc accaagctca 720  
 atcccaatac ctttctcttc atcaccataa ttctctgcag cagcaatacc agcagccccc 780  
 ttctggcctt gtcccagagt caccatncca gactcaatat gcacggacag gacatagcaa 840  
 cctgcgcaa caacctgagg tatttn 866



<210> 478

<211> 857

<212> DNA

<213> Homo sapiens

<400> 478

```

accatcatgt taccatattc ttgccaaaaa aaaaaaaaaa aaaaaaaaaa caccagagtc   60
gttacatgaa gtatctttga tcaactgaatt tccagcactt ctttgttggtg tctagatgct  120
aagccctttt ctaatttgaa aaaaaaaaaa aaacaaaaaa ctggagacct gattctgttn  180
atctcttgta gtttctctta tctctgtttc taaccactct atgtagtgcc tctttttttc  240
tgtctacaca cacacggagc atccaccata ccaataatca cagtatgtgg taatgaaaag  300
tggaaggga aaatggccct tgcttctcac agacaaactc actatctcaa tggatcattt  360
ttgttttttt gttttgtttt gtttttgana cagtctcact ctgttgcgca ggctggagtg  420
cagtagtgca atcttagctc actacaacct ctgcccccg gttcaagcaa ttctcctgcc  480
tcagcctcct gagtagctgg gattacggca cctgccacca tgccctgcta atttttgttt  540
ttttagtaga gatagggttt caccatgttg gccaggctgg tctcgaactc ctgacctcaa  600
gtgatctgcc cgcctcggcc tcccaaagtg ctgaaattac aggcatgagc cacagcgccc  660
cgcctcaatg gatcctgatg agctacgcaa accattatit ttatgtcttt acgaatgcca  720
ccagaaagtt catittgntc tttctgaaaa caacctgat tataagatgc ttctgaaaca  780
cggaagtgag agaacatgtt gtacagagaa catgcacctt ttgccctgcc ccatgnacct  840
atgctaagca tttataa                                     857

```

<210> 479

<211> 862

<212> DNA

<213> Homo sapiens

<400> 479

```

aacaacatg cagacagtct tacagctgca gttgcctgag ccttaagggc cttgctactc   60

```

aaagtgtggt cctcggaccg ccagcatcag catcacctgg gagcttggtta gagaaaacaa 120  
atctcagacc tcaccgaccc cacggaatca ctatctgcat ttttaacgaca tctccagggtg 180  
attcatctgc acacaagttc aaccacaggc tgaccattta gagaagctgg acttgagtgg 240  
gattttgcag tttttccttt tgatggcctc ctcccccttg cttccccctcc tacccttctg 300  
actccttgta gcttatttta gaacatgtcg ggatcctgct tctcttgta acaaaaggct 360  
gttggttaaaa tctttcagcc ggcagcagca atgtttaatt catggactag aaaattaatt 420  
ttatttticat gaatagagct gaggaaaaat agcaaggaga ctctgtgcat ggcccttggg 480  
aatccagctt gtctatttta cagatgaact ggcaacagtg gggaggcctg aggggagggc 540  
tgccttctac aaacttggtg agcaaattgt attaggatgc ttttggtgc aggtatcaca 600  
aaattcagct tcaaattggc taaaagaaaa ggaaaatttc taatttact gataaaaaat 660  
cttgagatag ggtactttta ngatgacca gaaatgcat caaatagcag gtttggtttc 720  
tgccatggtg gcttgggtgca ttcagntttc ctcatgggta caaggtggcc cgccagagtt 780  
ccgggcagca catgggagtc aatggcctat ggnangagaa agaggttgcc cttcctgaag 840  
ttcatttatac agaaacaaaa at 862

<210> 480

<211> 865

<212> DNA

<213> Homo sapiens

<400> 480

caattaaata cagtggacac aagccagtgt tatttattaa atcctggtgc tcaataaggg 60  
tgcctgctga gggttgggag cctggggcca ctacatcctg ctttttctct aaggagatta 120  
gctagtatta aagaagtgtt aagactagcc cagactgagt ctttctcctc aaagcatgaa 180  
gcacctgaga gcatcctgct ttcagcagga gggagccact cagaaactgt tccctagaac 240  
cctgttggtc aaagtgtggt aggaggacca gcagcctggc tgggtcaaagt agagttctca 300  
cctaggagat gtgggaacta cagaaacttg gccccctaga tcttcagaat cagaatctgc 360  
actttaacaa agttcctagg tacctcgggtg ccatttaaag ccagaggacc cctgacctac 420  
aggccacaga ccagataaaa gcagcccaag ctatcgtttc ctcttgctct cttgagtcac 480

accagcgagg cttttgtggt gcctttcatt cactgcagtg tcgagatgtg ccgccaagtc 540  
 acgaatattg tccacactgt ccttgcagtg taacattatc agggcctagg aacgactgag 600  
 cccctcgtag gcatgtgaca ctgtgttcct aagactgctt ctctcttttc atgaataaaa 660  
 gcagacacaa cgcangtggt tagaaaacta gnctgggatt aatattttta gctagacctt 720  
 ggatgcctca gactttatat tcgtgggtta tttcaattc tggtcattgt attggctctt 780  
 acattaaata tactggtttg gccctagaaa tggcaaaatc acgaagtcac cactctggct 840  
 ggccttaagg agctcacaag ccatt 865

<210> 481

<211> 745

<212> DNA

<213> Homo sapiens

<400> 481

tattgatctg ttaggaatg tactgaattt cacgaaacac agcttattta tttaggtagt 60  
 agtcccccaa acttgaatct agtgaaaggt ggcagacatt ttagctcaga gttttctgac 120  
 atttgatttt gtaaataaat cgggtgggtaa cagatctgtg tcatcctatg tgatgtgatg 180  
 tgatgtcatc ctatgtgatg tgtactctgg ggtactcaca tcctatgtga tgtgtctcaa 240  
 gtgactgtca cacagtggac actttaccag tgctagcttg aatgaggtct acctccatgg 300  
 cccagccctg ctgcccccta gtgatttcat tgaatgggat gaaaaggtaa aaagtgccta 360  
 agacctgtag aagggactac atcaggtagg gtatgggaat atttaggact actttggtaa 420  
 ttattgaaaa gtctagagta ttaagccact ggtgggtttg tgaggcacga gtgagttgaa 480  
 cagtttggtg ggctttggtg tatctttgct ccagaattat atcaccagtt agctgttagg 540  
 tgctgccatt tggtaacgtg ccaacttttc aaaaatgggt tgccccaac tagatttttc 600  
 tatcttctcc aaagccagag ccaccttcct gtcctagtgc attttttagca gtgccccgtc 660  
 atcttactgg cattcacctg ggcttnctgn gctcaatcag gggccaagtc tggcctgatc 720  
 tcagttncac agttcctcta ctctg 745

<210> 482

<211> 755

<212> DNA

<213> Homo sapiens

<400> 482

```

tttgtttaat acatgttaaa caatagtgca tcagtgggtt gtctctttta agatcactaa 60
cttggggcat accgtaccgg ttggacaaga tctcaaagg tgacttaact tttaatgagt 120
gcttataaaa acatgtgtgt tgcctcatga cactatgcaa ttgctgcttt agtgggtgctt 180
tttgcatgcc agttgaattg tacatagggt ggcccatatt gctcaccatt tagttagatc 240
ttcattgttt agatctcagt atgttgaaaa tctgggaaca gcatcataga aaactatatc 300
ctcctctctt agaacattgc ttagcaaaaa ttatgttttg ttctctaaat gaacttttcc 360
aacttcgaaa tttgtgact tttaaataat gtataatact ctaatgttat tctaggaaca 420
agccagcatg tttggcctta ttacaaagc agttaatata ccagtgttag aataagtcaa 480
aacactgtac caatgaaaat gtgtgctctt ccaagtagta tatgtgtttt attttaatat 540
ttagaagatc taaaagcta taggaacaca gtgtccactt gtaacttaat agcatgcctt 600
aaacttaag atatctggcc gggcgcggtg gctcacgcct gtaatcccag cactttggga 660
ggccgaggcg gtggatcatg aggtcaggag atcgagacca tncctggctaa caaggtgaaa 720
ccccgctcta ctaaaaatnc naaaaattag cccgg 755

```

<210> 483

<211> 876

<212> DNA

<213> Homo sapiens

<400> 483

```

gtggctgtac tggcggcggc agggctggcg gcttaggccg cagaggtctg tgggcctgag 60
cccacgtgg actctgtccg ttctgcgatg actgctgctc tggccgtcgt caccacgtcg 120
ggtttggaag atgggggtgcc taggtcccgt ggcgaaggga ccggggaagt ggtcttgag 180
cgggggcccc gcgcggccta ccacatgttc gtgggtgatgg aggacttggt ggagaagctg 240

```

aagctgctcc gctacgagga ggagttcctc cggaagagca acctgaaggc cccgtccaga 300  
 cactatcttg cactgcctac caaccctggc gaacagtctt acatgttttg tactcttgct 360  
 gcttggttga ttaataaagc gggacgtccc tttagagcagc ctcaagaata tgatgaccct 420  
 aatgcaacaa tatctaacat actatccgag cttcgggtcat ttggaagaac tgcagatttt 480  
 cctccttcaa aattaaagtc aggttatgga gaacatgtat gctatgttct tgattgcttc 540  
 gctgaagaag cattgaaata tattggtttc acctggaaaa ggccaatata ccagtagaa 600  
 gaattagaag aagaaagcgt tgcagaagat gatgcagaat taacattaaa taaagnggat 660  
 gaagaatttg tggaagaaga gacagatnat gaagaaaact ttattgatct caacgtttta 720  
 aaggcccaga catatcactt ggatatgaac ganactgcc aacaagaaga tattttggaa 780  
 tccncaacag atgcttcaaa atgganccct aaaaatggaa cgtggtacta ccggaactga 840  
 aagtcccgat taggacttga caataaggga ttgggn 876

<210> 484

<211> 797

<212> DNA

<213> Homo sapiens

<400> 484

aaggttatgt gtgatcgggt gtgggagaga cactcttttg ggctctgtat gggacattga 60  
 gagaccgtat gtgggagtga gagaccgtgt gtgacgggtc gtgtgagggg gcagtgtgtg 120  
 tggctgtgtg caacatgggt agcatacgggt gctgtgtgtg tcacagaagt agattctgtg 180  
 tgagagagag tgagactgat gactgatgta cactgagagg tgggtgtggc aggtgtcatg 240  
 agaggcacat agggggcctg ggtgggacag acacagttag tgcagacag tctgtgttgg 300  
 ccactctgtg tatggcttgt gaaaaagtgc gtgatccggg cacattgtctg taatcccagc 360  
 actttgggtg gctgaggcgg gaggatccct tgaggccagg agtttgagat cagcctgggc 420  
 aacataggga gaccctccc cccacccccg ccgtctctac caaaataaaa ataaaagaaa 480  
 ttaaccaggt gcggttatgt acctctgtgg tcccagctac tgggaggctg aggttggagg 540  
 atcgcttgag cctgggaagt ggaggctgca gtgagctaag atcgtgccac tgcactccag 600  
 cctgggtgac agagagagag acctgtctc aaaaaacaaa aaaaaactgc gtgactatgt 660

gtgacactga gctggtgaga gatggcagcg ttgtgacagt gcatgccaaa agtttgcggc 720  
 ttgtgcaggg cactcggaac cnaaagcctn agggaggcct tgtgtgtana aggcaagaaa 780  
 tgatggaaaa ggtggga 797

<210> 485

<211> 832

<212> DNA

<213> Homo sapiens

<400> 485

agttaaaaca attttttaag agaaaggaga taaccagagc atagccagca gaaggactcg 60  
 catgaggttt ggtgggactg cctagggaga aggaggcagc tggctgcgtg acagagccca 120  
 gtgatagggg agggcctgtg accccttaag gagctgagac gctgtcacag agcaatggga 180  
 gcgctgagtg atggagctgg atttgtgctt ttagaaaagc tttgttggct gctgttggga 240  
 gaatggattg gaagggggtg agactgcagt cagagactcc cataaggaag ctgttactgt 300  
 aatcacaaca acagatgcct acactccttc ccaagacttc cctctctgat cttagaagca 360  
 ttgtcaaate tgggttccca gcctgccatg gcaagctgct tgctacttgg gagtgaaaag 420  
 cccttgttga gctttttctt attcggtagc tgctcataaa gtgccttcac ctgcttggcc 480  
 ttattagcca gtcctgcctc caaattacca ccacttgctc ctttcaggag tctcttcccc 540  
 ctaaagtccc tattactcct tctctctgct ttcagatcag aacagaaaa agtcaccttc 600  
 cctaagagtc tgctccagtc cagtagaaat gctttaaaat ttttctggcc tcanctgccc 660  
 ttcttgagca cagaaatttc tagaatattg aatgaatcac tggttcttta taatcatttt 720  
 gtccagtttc aatcactgca ttttaggaaa gatgtgaaaa actgaaggac aaagtggggc 780  
 ctttaaagga cttangattc tttcaganga aagtatctaa ngaacaagtt aa 832

<210> 486

<211> 762

<212> DNA

<213> Homo sapiens

<400> 486

```

taaaactccc gtctctgccaaa aataacaaa aattagccgg gtgtggtaac atgtcctgt 60
agtcccagct actagggagg ctgagatggg agaatcgctt gaacccggga ggaggaggtt 120
gcagtgcgcc gagaccacat cattgaactc cagcctgggt gacagagtga gactctgtct 180
caaaaaaaaa aaaaaagttg tggtcataaa acttggttca gatgccgtca gcggcatgcc 240
ttgcctaggg tcttgccctc cttgtggcct ctgcacaccc tgcctagtct ttccttcct 300
cctgaccttt ctgaatctga ttcctccttt tgccccaagc agaatccac cttctccagg 360
aagggtgttag cttttagtag accactctg ggacactggg acctgctgcc ttagaccgtg 420
gcctttcccc ttccagaggg cagggcgggc tcagcacctt cttggtccac agctgatctt 480
tttagctgc tgaagggtct ggggctgtgc cctggggaag ccatgacgt cccctgcgta 540
gggtcactgg gtggctcctg cagccagact tggacacct cctttgcag atttctgtct 600
cctccccagg aaccagctgc cttccttctg gggcgaattc attcttatcc cacagcccca 660
gcataatggg atctggctca nggaggcctt tctgatctg ccttaggttt gccttcctg 720
tgagcaagcc cttactgncc tctgncttcc cgttgagctg ca 762

```

<210> 487

<211> 852

<212> DNA

<213> Homo sapiens

<400> 487

```

tgtacaagag atcattgtca tcttgggtgt tctttgtatt cttcatacta gaaatccata 60
acacgccaaa tgcccttaga accatggaca gcaccaggt ttacaaatg tcttctccag 120
gcttcagaag gaagggtgtg gacattcttt ccatcatgac acaaaccaac aattacatac 180
caggctttgt tggtagagaa gcaagggtggc ccacctggag atttatgccg aaacaaccac 240
tttacaacac aaccacgga gtccttgacg ttggcttggg ttgtcaatcc caccacctca 300
taccatttag aaacttatca gctatttcta gataactggg tgttttagtt tctgtagat 360
aaaactgaag gctaaattga atatatgact aagttattta ctatgaggaa tcttagtcca 420

```

ggaaaacctc tcaaaataca caaatgtctg agagatgtaa tatatttaat taatccctta 480  
 ctcccttttat ttttattttt ttttttttca gagacaaggt cttgctttga caccagaggct 540  
 ggagtgcagt agtgcaatca gaggtcatta cagcctccaa ctctgggct taagtgatcc 600  
 tcctgcctca tcctcccaag cagctggagc tacaagtgtg caccatcatg cctggcccct 660  
 ttattcctaa acgtttcttc atgaaggaag atncaaattt acatgagccc atgctcttca 720  
 catgggtaag gggaaaacag agagactcca gggcacccac atattgggct ttatcattgg 780  
 nctaggaaca gtcttggaat aggcagcttg ggttctactn ccagaaatac tttgccatnc 840  
 attaatttat tc 852

<210> 488

<211> 806

<212> DNA

<213> Homo sapiens

<400> 488

gaaccaggag tttggcgtga ccatgggtgag agaagacggt ccaagaaggg acgttatcag 60  
 gccacttttt ggggtggagaa ggaggtagtc agaccgtggc caaatttcct tcacattatc 120  
 ctagcatatt ttcattctgg tcttagctct taaacttctc caagcgggtga ctgttatgct 180  
 ttacagagtg gggaagaggg tctgggttat ttgaggcaag aagggaaggc aatagacaag 240  
 agaaaagaag agactttaaa agatgccgtg tgtttccaac ttttttaatt ctaaaatttc 300  
 tgtttcaagg ggaagcaaaa gaaaacaagg aagtatgcga ccatgaagcg aatgcttagt 360  
 ctacagagatc agaggctgtg agtgtctgga atcaactgcc cagggatatt ctaataagag 420  
 tctagagagg ataagtagta aaaatgtttg ttgttattat tttgtttttt gcttattatc 480  
 gtgtcttaga tttatatagc atgagatagc cagtgtttta cagtaattta gctgctgagc 540  
 gatcacactg ggaaaggcgt tgggaattaa acatttctta agtggttact ttttctaccg 600  
 ttatatgctt tgtctgccat atcgcattha aacctcatgt cagttcgggtg aagtccgtat 660  
 agttctcttt atgtttttac cattacacta ctacattccc ctgggggtggg gccaaagggga 720  
 gtgtttcttg ttgaaagatg gcaagggttag agaccttgnt tggctggcgt ttccagtgcc 780  
 ctggnactca aatattttttg gcanaa 806



<210> 489

<211> 889

<212> DNA

<213> Homo sapiens

<400> 489

```
tataaaacca taataaatta cttagactac aatgagcaaa acacatttgt gggtttggtc 60
agcagatact gctctgattt gccattaaaa tcttaaaaat tcttaaaaag ctctcttgaa 120
ttcgacctct actaccttcc aaggaccttg gaaagactta agtatgtgtt agaactctct 180
tgaaggcttg gtcttccttt agtgacatta acactcaggt ttgttattcc agtgggcagc 240
cccagttcat gcaaactgac ctgttggtgc tgggtgcctt agactttgat atgcaggcca 300
aagtccaagg gatatgcaaa cataacacac acctgtactt ccataaaaac cagcagaatt 360
gtagatcagc tcattttact gaaattttta accctgtaaa aaaaaaata ctatgtttga 420
agaaagaaat cctggtgcat ataaaaacta caatgagtaa cagtaatata ggtaagaatc 480
aagcaggcct tgagcaaaac agtccattat tactgcgtaa actatgttgc tatgatactt 540
attttgagcc tttatgcacc agcacatata tagtaagaca cacaagatag ttcaacaaaa 600
tctaagtaat atacaaacac tgtaagagct tttccaacca aagaaacttt aatgtagatc 660
tgaaatgagc catcatgata cagaaaaaga tgattaccat ttcgtgtcct ttccaagtag 720
aactatctga taaacttttc tggttgtatc agaagagatt tcaactcaac atgaaaattc 780
tactacttgg gaattatttg aaaaaatcaa gtatttgaag gaaaaaatta tttttcatct 840
aaaggacgct tacattttcc ttttgctaga aacgaatgcc atggatgan 889
```

<210> 490

<211> 723

<212> DNA

<213> Homo sapiens

<400> 490

acatggaatg atcagaatcg tggaggcaaa gctctgtcca aaaatgttca ttttgttttg 60  
 ttttgttttg ttttcttggt ttttaacattt ccttcatacct ggtgaaatat cctggaaatt 120  
 catagatctg ggtttgggtga tttcaaaaact caccatgccc agtggccatt tcagttactg 180  
 ccgtgacatc cctgaggcta ccatactctc aaaaccaaact caatgccagt gatctaacag 240  
 gattctttct tatttatgag ttttgttttag atggatattt ttgcagagca taaaaaatta 300  
 aatgacattt agttatccat tgaatgtatc accctgactt aaaaaaaaaat ccttaaataca 360  
 aaacttttca aaaaatctgg gctatggagt cactccctct gtggagcgag agcccagtct 420  
 tttctgggtac taaggccaca gaggcaattt ccagtagcat ttttatatct tctctaagtt 480  
 tcttttcctt ttctgtctgt atctgttttt ctctgactgc ctatatctta ctttgtatac 540  
 ccatacataa attattttcc catcttctct ctccccctt ttttctgatt tgttttctct 600  
 cttgcaagaa actctgaaat aaccttcaga acacaaaaaa ctggagggtc tataacctaca 660  
 gagtcattat cattattgng attaccattg ttactgntgn tgggtgtttt cctcttttta 720  
 ttg 723

<210> 491

<211> 808

<212> DNA

<213> Homo sapiens

<400> 491

cttagtgggtg tcgggggtcta gtggacagag aagactcttg gccaggcaga tggcttctcg 60  
 gtggcagaac atggggacct ccgtgcgccg gagatctctc cagcaccagg agcagctgga 120  
 ggacagcaag gagctgcagc ctgtgggtcag ccatcaggag acctctgtag gggccctggg 180  
 gtccctgtgc agacagtcc aaaggaggct gcccctgaga accgtcaacc tcaacctccg 240  
 cgcagggccc tcttgaaaac gcctggaaaac cccagagcca ggtcagcagg gcctccaggc 300  
 tgcagctcgc tcagctaaga gtgctttggg tgccgtgtcc cagagaatcc aggagtctg 360  
 ccaaagtggc accaagtggc tgggtggagac ccaggtgaag gccaggaggc ggaagagagg 420  
 agcacagaag ggcagtggat ccccaactca cagcctgagc cagaagagca cccggctgtc 480  
 tggagccgcc cctgcccact cagccgcaga cccctgggag aaggagcatc accgcctctc 540

tgtccggatg ggctcacatg cccacccatt acggcgatca aggcgggagg ctgccttccg 600  
 gagcccctac tctcaacag agcccctctg ctctcccagc gagtctgaca gtgacctaga 660  
 gcctgtgggg gcgggaattc agcatctcca gaactgtccc aagagctaga tgaagccatt 720  
 atggcggaag anagtgggtga catcgtctct ctcattcatg acttgaggaa gtgccttgca 780  
 ngaaaacaag ccctgtctgg accgncaa 808

<210> 492

<211> 874

<212> DNA

<213> Homo sapiens

<400> 492

agaagatcta ggaaagaaga ttgctttggc cttgaacaaa gtggatggag ccaatgtggc 60  
 tcttaaagac tctgaccaag tagcacagag tgatggggag gagagccctg ctgctgaaga 120  
 gcagctcttg ggagagcaca ttaaagagga aaaagaagaa tctgaatttc taccctcatc 180  
 tggaggaaca ttttaatatct ctgtcagtgg ggacattgat ggtttaatta ctcaggcttt 240  
 gctgacgggc aattttgaga gtgctgttga cttttgttta catgataacc gcatggccga 300  
 tgccattata ttggccatag caggtggaca agtactcttg gctcgaaccc agaaaaaaat 360  
 acttcgcaaa atcccaaagc aaaattacca ggctcatcac tgcagtgggtg atgaagaact 420  
 ggaaagagat tgttgagtct tgtgatctta aaaattggag agaggcttta gctgcagtat 480  
 tgacttatgc aaagccgat gaattttcag ccctttgtga tcttttggga accaggcttg 540  
 aaaatgaagg agatagcctc ctgcagactc aagcatgtct ctgctatatt tgtgcaggga 600  
 atgtagagaa attagttgca tgttggacta aagctcaaga tggaagccac cttttgtcac 660  
 ttcaggatct gattgagaaa gttgtcatcc tgcgaaaagc tgtgcaactc actcaagcca 720  
 tggacactag tactggagga gtctcttgc tgcgaanatg aatcagtatg cccatttgnt 780  
 ggcagctcaa ggcagtattg ctgcagcctt ggcttttctt cctgacacac caccagccaa 840  
 tatcatgccn ctttgtgaca gactttgtan accc 874

<210> 493

<211> 834

<212> DNA

<213> Homo sapiens

<400> 493

```

agacgatccg ctagccacat taggcgctcg gtctctgcgt ccgccccctcc cgtgcctcag   60
agacttgcgc tccccaggcc cgagccccctg tcggcccatc ctcgagccccg tgtggctcgc  120
gaacctctaa ctccagccgc tgcagcccccc tcccaggccc ggcgtccccg agccccgcgg   180
gcgccgcgcc tgcccttctt tggctacgct gcagccgcgg tgcggcgag tcctcccggg   240
ttgccccgcg gggcgtcaga gggagggcgg gcgcccgct ggtgacggcg acgcctgcag   300
cccaaggagc gctccactcg ctgccgccgg aggggccggt gacctcttgg ctaccccgcg   360
tcggaggctt agatggctca ggcgaagatc aacgctaaag ccaacgaggg gcgcttctgc   420
cgctcctcct ccatggctga ccgctccagc cgcttgctgg agagcctgga ccagctggag   480
ctcagggttg aagctttgag agaagcagca actgctgttg agcaagagaa agaaatcctt   540
ctggaaatga tccacagtat ccaaaatagc caggacatga ggcagatcag tgacggagaa   600
agagaagaat taaatctgac tgcaaaccgt ttgatgggaa gaactctcac cgttgaagtg   660
tcaagtagaa acaattagaa accccagcag caagaatccc taaagcatgc cacaaggatt   720
attgatgang tggatcaataa gtttctggat gatttgggaa atgccaagag tcatttaatg   780
ncgcttctga agtgcatggt catctgaggt gccacatggg ccagnttggn tcaa          834

```

<210> 494

<211> 823

<212> DNA

<213> Homo sapiens

<400> 494

```

attgtgggaa gggcggccgg tgcagccgca gctgccatct taggggcgcc tggcgctacg   60
gtttctcgt tggaggcggc cttcgtggca gctgtagacg ccgggaaaag gcataaagtc  120
cgttggccga cacctttctt tcctccggcc tcggtagaac cgccagccccg cgtccgaagg  180

```

cggaggcgag gggaactggc cgcgtgaggg gcctgaggcg agcggttaga gcgtctcccg 240  
 gaaggatggg ccggtctcgg agccggagct cgtcccgcctc caagcacacc aagagcagca 300  
 agcacaacaa gaagcgcagc cgggtcccggc cgcgatcccg ggacaaggag cgcgtgcgga 360  
 agcgttccaa atctcgggaa agtaaacgga accggcgggc ggagtcgcgg tcccgttcgc 420  
 gctccaccaa cacggccgtg tcccggcgcg agcgggaccg ggagcgcgcc tcgtccccgc 480  
 ccgaccgcat cgacatcttc gggcgccacgg tgagcaagcg cagcagcctg gacgagaagc 540  
 agaagcgaga ggaggaggag aagaaagcgg agttcgagcg gcagcgaaaa attcgacagc 600  
 aagaaataga agaaaaactc atcgaggaag aaacagcacg aagagtagaa gaattggtag 660  
 caaaaagggt ggaggaagaa ctggagaaaa ggaaggatga aattgaacga gaagttctcc 720  
 gaagggtgga ggaagccaaa cgcatcatgg aaaagcagtt gctcgaagaa ctcgaaccga 780  
 caganacaag ctgaacttgn cggacaaaaa agcttganaa gga 823

<210> 495

<211> 752

<212> DNA

<213> Homo sapiens

<400> 495

gcgcacgtcc cggagcccat gccgaccgca ggcgccgtat ccgcgctcgt ctagcagccc 60  
 cggttacgcg gttgcacgtc ggccccagcc ctgaggagcc ggaccgatgt ggaaactgct 120  
 gcccgcgcg ggcccggcag gaggagaacc atacagactt ttgactggcg ttgagtacgt 180  
 tgttggaagg aaaaactgtg ccattctaatt tgaaaatgat cagtcgatca gccgaaatca 240  
 tgctgtgtta actgctaact tttctgtaac caacctgagt caaacagatg aaatccctgt 300  
 attgacatta aaagataatt ctaagtatgg tacctttgtt aatgaggaaa aaatgcagaa 360  
 tggcttttcc cgaactttga agtcggggga tggattact tttggagtgt ttggaagtaa 420  
 attcagaata gagtatgagc ctttggttgc atgctcttct tgtttagatg tctctgggaa 480  
 aactgcttta aatcaagcta tattgcaact tggaggattt actgtaaaca attggacaga 540  
 agaatgcact caccttgtca tggatcagt gaaagttacc attaaaacaa tatgtgcact 600  
 catttgtgga cgtccaattg taaagccaga atattttact gaattcctga aagcagttca 660

gtccaagaag cagcctncac aaattgaaag tttttacca cctnttgatg aaccatctat 720  
tggaaagtaa aaatgttgat ctgtcangac gg 752

<210> 496

<211> 465

<212> DNA

<213> Homo sapiens

<400> 496

cttagtggtg tcggggtcta gtggacagag aagactcttg gccaggcaga tggcttctcg 60  
gtggcagaac atggggacct ccgtgcgccg gagatctctc cagcaccagg agcagctgga 120  
ggacagcaag gagctgcagc ctgtggtcag ccatcaggag acctctgtag gggccctggg 180  
gtccctgtgc agacagtcc aaaggaggct gcccctgaga accgtcaacc tcaacctccg 240  
cgcaggggccc tcctggaaac gcctggaaac cccagagcca ggtcagcagg gcctccaggc 300  
tgcagctcgc tcagctaaga gtgctttggg tgccgtgtcc cagagaatcc aggagtcctg 360  
ccaaagtggc accaagtggc tgggtggagac ccagggtgaag gccannaggc ggaagagagg 420  
agcacagaan ggcagtggat ccccaactca cagcctgagc cagaa 465

<210> 497

<211> 830

<212> DNA

<213> Homo sapiens

<400> 497

ttcagaaggc cagccggcag gaggagccgg acagcctctc ctattactgc gctgctgaga 60  
ccaacggggt ggggtgcagcc tcgggcaccc cgccctccaa ggctaccctg gaggggaagg 120  
tggcttcccc caagcactgt gttctggctc ggcccaaagg gactccccct ctgccccctg 180  
tccgaaagtc cagcctggac cagaagaacc gggccagccc tcagcacagt gccagcggca 240  
gcggcaccag cagccccctg aaccaaccag ccgccttccc ggccgggcctc ccagacgagc 300

ctagcggcaa gacgaaggac gccagcagca gcagcaagct cttcagtgcc aagctggagc 360  
 agctggccag cagaagcaac tcgctgggca gggcgacggt cagccactac gaatgcctct 420  
 ccccgagcgg ggccgagagc ctgtcctccg tgagctcccg gctgcacgcg ggcaaggacg 480  
 gcaccatgcc ccgcgcgggg aggagcctgg gccgcagcgc cgggacctcg ccccccagct 540  
 ccggggcctc gcccaaggcc ggccagtcca agatctccgc cgtgagcaga ctctccttg 600  
 ccagccccag agcgcacggn ccgtccgcct ccaccaccaa aaccctcage ttctccacca 660  
 agtccttgcc gcaggcggtg ggccagggtc tcagctcgcc ccccggtggg aagcacacgc 720  
 cctggtccac gcagtnctt cagcaggaac aggaagcttc ggcctgggct tcaaagcttt 780  
 cccttgcggg gccgtcaagc ngggcgcatc ttcggaactt gcttcanggt 830

<210> 498

<211> 847

<212> DNA

<213> Homo sapiens

<400> 498

tttccatggg cagggtcgac agactccctt ttcagtgatt tctggctctg agaaacctct 60  
 ttactcacta gaaaagaact ttatttaaatt ggccaatttt gttcctcaga aaaagaaatt 120  
 aaaaaaaaaag aaaaatagga tactgaagac agaaccatgt gacttggtga caaacaaaag 180  
 gaggggtgca ctagaatttc aataggctcc ctaattccat agaaaaagca aagcaacca 240  
 atgcctcctg agcctgcagt gcatgaagag agtgcttgag ctgaccagc caccaggcct 300  
 tctggggcta gacataactt cccactggaa cagcagcagc ctctttcccc tctttgtgtt 360  
 ttcatgaaga aaacggctgt tctcttaggt agccaggaaa tagattacat ggggcaaaact 420  
 ttcaaaagca atctctaccc tgggtgctcag gctacataca gaggcagaaa aggggcacgg 480  
 aagagccctt gctcttgaga gagagtattt tcatattccc aagggtttc cgtgtagagt 540  
 tgctatttct gatatactt aaacctttac aagaaaaaag gctgtgggtga ctcagtgttc 600  
 ctataaattc agaatgtgga aactactaat ccaaagcatc acttctagca ctgagtatca 660  
 agacgatcag cctgaccaa atattgcaa gagttttcta agtctctgaa gatttttttc 720  
 tncctgaaca ctgagtctat agcagtcagc aatgtcctta cccgatccct ggggaatggg 780

tatggaacag taagggttg gttccatccn ttttagagtg aagagatnga aaattagggc 840  
tacctan 847

<210> 499

<211> 819

<212> DNA

<213> Homo sapiens

<400> 499

gtcataaaca agccatgcaa ggtttcaagc tctacatgcc acggggtcgg tactggcggc 60  
ttcgtctctg tcctgaacct cccagtgtc ctagtgagta tgctggttta gtggtcgcga 120  
ccgtactgga gcctgtgttg caaggattgc aagggttgcc acctcaagcc caggccccctg 180  
cccttggtca ggctctgacg gccatcgtgg gtgcctggct tgaccacatt cttacccatg 240  
ggatttggtt cagcctgcag ggagcgtgc agctcaaaca agactttgga gtggtcaggg 300  
agttgctgga agaggagcag tggagcctgt cccctgatct ccgccagacc ctgctcatgc 360  
tcagcatctt ccagcagctg gatggggccc tgctgtgtct gttgcagcag cccctgcccc 420  
agtctcaagt ccacaggagg cccccctgtt gctgtgagtt actccccctc gctcactgct 480  
ttgtgtgtcc caaacctat tctaccatt aatctggctt cagtatatcc ccagcagcca 540  
cctaccttcc actcctgcct taccaggtgc ttgicaggag gtccagacca cgaaattgcc 600  
cagcagctgc ctcaatagcc tggagagctt ggagcccccg ctccagcctg gaacatctnc 660  
agcccagaca ggtcanctgc aaagcacact aggaggaagg ggacctagcc cggagggcta 720  
cctggtggga aaatcagcag gcctggcttg gcctnaggca acaccaagcg aaccccgttg 780  
gnaccctggc cgtttttttc cttgccttgg ggaanccag 819

<210> 500

<211> 711

<212> DNA

<213> Homo sapiens



<400> 500

```

atgcagcaga tccgcccgcc cttcatccgc gggcctccgc accatgcctc caacccccaac 60
agccccctgt ccaaccccat gcttcccggc atcgggcccc cgcccgggtg cccagaaac 120
ctgggccccca cttccagccc catgcaccgg cccatgctat cgccccacat ccaccccccg 180
agcacccccca ccatgcccgg gaacccccca ggcctgctgc ccccgccgcc tccgggcgcc 240
ccactgccga gtcttcctt cccgccagt agcatgatgc caaatggccc gatgccggtg 300
ccccagatga tgaatttcgg gctgccgtcg cttgccccgc tggtgccgcc cccgaccctg 360
ctcgtgccgt accccgtgat cgtgcccta ccggtgcca tccccatccc catccctatc 420
cctcacgtca gcgactccaa gcccccaag aagctgctgt cgcctgagga accggcggtg 480
agcgagctag agtcggtcaa ggagaataac tgtgcttcaa ctgccacctg gacggggagg 540
cggcaaaaag ctgatgggcg aggaggccct ggcggggggc gacaagtcag acccgaacct 600
taataacccc gcggacgagg accatgccta tgctctgcgg atgctgcaa gaccggctgn 660
gtgatccagc ctgtgcaaaa cccgcggaga angctgcatg gnaccgtgca t 711

```

<210> 501

<211> 840

<212> DNA

<213> Homo sapiens

<400> 501

```

ttgccagcta tccacctcag agtggatatg ctaacaggga tgtactaaaa attgcaaaca 60
ttgaaggctt ctctaattcc agatacaca caaaatacca tccaagacca taccacacag 120
agacttccaa ggccatcctt ggaaaaatgg agaagtagaa ggccccatt attttatttt 180
atttttattt ttttgagatg gagtctcgct ctttaccaca ggctggagt cagtggcgcg 240
aacttggctc actgcaagct ctgcctcctg ggttcaagcc attctcctgc ctcagcctcc 300
tgagtagctg ggactacagg tgcccatcac caggcccggc taatttttt gtatttttag 360
taaagacagg gtttcacat gttagccagg atggtctcga tctcccgacc tcataatccg 420
ccgcctcag cctcccaaag tgctgcgatt acaggcgtga gccaccgcgc ctaaggccc 480
ccattcttaa ctgttaactc ctgaattggg gatttctgtc aatctagcag aaactccaaa 540

```

aggattctct gtactagaac cttgattgtc tgatcacccc tgtttcttat ttttcttatt 600  
 tttaggcatt aattccaaaa acatccatca gacagacatt taggaagtgt tctttctata 660  
 caacagagac ttggacaggt gaatcagacc acagtccttg gttcattaag ttttcaattt 720  
 tggaagggga aggaaaggag aatgagacag ccaaaaactt ggctaactgg tactgaagtg 780  
 atgggtgang acaggagaca gagccnttaa ttctgctgga ctagcagatg gggncittca 840

<210> 502

<211> 745

<212> DNA

<213> Homo sapiens

<400> 502

ggctcctccc ccaccggcct tcaccttttg ticcctatcc tgggccagtt ctctcgcagg 60  
 tcccagatgt ccagttccag atgcctggac ccagagtgtg ggggaaatat ctctggagaa 120  
 gccctcactc caaaggctgt ccaggcgcaa tgtggtggct gcttctcttg ggagtcctcc 180  
 aggcttgccc aaccgggggc tccgtcctct tggcccaaga gctaccccag cagctgacat 240  
 cccccgggta ccagagccg tatggcaaag gccaaagagag cagcacggac atcaaggctc 300  
 cagagggctt tgctgtgagg ctctctttcc aggacttcga cctggggccg tcccaggact 360  
 gtgcagggga ctctgtcaca atctcattcg tcggttcgga tccaagccag ttctgtggtc 420  
 agcaaggctc ccctctgggc aggccccctg gtcagaggga gtttgtatcc tcagggagga 480  
 gtttgcggtc gaccttcgc acacagcctt cctcgagaaa caagactgcc cacctncaca 540  
 agggcttcct ggccctctacc aaaccgtggc tgtgaactat agtcagccca tcagcgangc 600  
 cagcangggc tctgaggcca tcaacgcacc tggagacaac cctgccaagg tcagaccact 660  
 ggcaggagcc ctattatcag gccnggcag caggggcact cacctgtgca ancccaggga 720  
 cctggaaaaga cngacaggat gggga 745

<210> 503

<211> 812

<212> DNA

<213> Homo sapiens

<400> 503

```

agcaaagagc cgaggccggg cgcgcgaccc tcgtccttct gcccctggcc gcacactttg 60
cgcacatctc tttttctgca tgggtgatat tatttttcat tatecttttc tgggtgctat 120
gggtgatcat tccaagaaga agcccgggac ggccatgtgc gtgggctgcg ggagtcagat 180
ccacgaccag tttatcctgc ggggtgtcgcc cgacctcgag tggcacgcgg cctgcctcaa 240
gtgtgccgag tgcagccagt acctggacga gacgtgcacg tgcttcgtga gagacgggaa 300
gacctactgc aagcgggact acgtcaggct gttcggcatc aagtgcgcca agtgccagggt 360
gggcttcagc agcagcgacc tgggtgatgag ggcgcgggac agcgtgtacc acatcgagtg 420
cttccgctgc tccgtgtgca gccgccagct gctgcctggg gacgagttct cgctgcggga 480
gcacgagctg ctctgccgcg ccgaccacgg cctcctgctc gagcgcgccg cggccggcag 540
cccgcgcagc cccggncgcg ttcccggcgc ccgcggnctg catctgcccg acgctgggtc 600
gggccggcag cccgcgttgc gccccgcacg tgcacaagca gacggagaag acgacccgcg 660
tgcggactgt gctgaacgag aagcagctgc acactctgcg gactgctacg ccggcaaccc 720
gcggccgacg ctntcatgaa ggagcacttg tggagatgac cggnctgagc ccccggggca 780
ttccgcgttt ggttccanaa caagcgcttg aa 812

```

<210> 504

<211> 792

<212> DNA

<213> Homo sapiens

<400> 504

```

tctaaaattc ctataatitt ttgctgcata ttatcctcat ccccaaaata acatccattt 60
taaagtgtat agttgagggg aaggatgctg tttttggtat aagttgtcaa atatggaaca 120
tttgacctgg agagggctaa aatcaatatt taatcctcag agcttcacct gtcaaaacta 180
tttaagtctg cagaaaatca agattgaaat gaaaactacc aaccagctga acatccaaaa 240
cgtcaaattc cttaacatga tgtaaaaaat gtaagctaaa aggaattagt ccattttgat 300

```

agcagcaata gagagccctg tgtattcgta ttcgactttc atggaaaggt tcttctgtgg 360  
 caagaccacc tgtggaacta gtacctaacc acacagattt gttttatttt agagcttcac 420  
 aatttgagat ctcaaaatac aaaacctaata aaggctgaaa cacagggtct atgaaggcta 480  
 agaaccacaca ttaattcaaa aagttgacac agctaaacat cttacaagca tgaggtgaga 540  
 actgcagaaa ccaaagctgt gctaacatct cacctctact gctttgatgt gatctagatg 600  
 cacagtttagc ttcagtgtgg cccgttatct aatagaacca tctttcaagg cttttcatta 660  
 gaaatgacaa aaagccagtt gctctggctg tgtggcttca gaggcacatt tncagntaat 720  
 cagtacaacc aaagtcaacc taatagttga ctggnattta atttatttta atttactttt 780  
 attatagaac ta 792

<210> 505

<211> 726

<212> DNA

<213> Homo sapiens

<400> 505

cttcgctcta gctgggaggc tgacggcccg cgggcgtaag cggactgcag ccgcgagctc 60  
 ctggaggcgg cgggatggag gcggcggccg agccttgaaa cctggccggc gtcaggcaca 120  
 tcctcctggt cctctcagga aaggggggcg ttgggaaaag caccatctcc acggagctgg 180  
 ccctggcact gcgccatgca ggcaagaagg tgggaatcct ggatgtggac ctgtgtggcc 240  
 ccagtatacc ccgcatgctc ggggcgcagg gcagggtgt gcaccagtgc gaccgcggct 300  
 gggcaccctt cttcctggac cgggagcaga gcctctcgt catgtctgt ggcttcctgc 360  
 tggagaagcc ggacgaggcc gtggtgtgga gaggcccaa gaaaaacgcg ctgataaagc 420  
 agtttgtgtc cgacgtggcc tgggggggagc tggactacct ggtggtggac acgccccggg 480  
 ggacctccga tgagcacatg gccaccatag aagccctgcg tccctaccag cccctggggg 540  
 ccctcgtggt caccacgcc caggcgggtg ccgtggggga cgtgaggcgc gagctgacct 600  
 tctgtaggaa gacggcttgc gggatgatgg aatcgtggag aatatgagcg gttcactgcc 660  
 acactgacga tgaccacgtt ttcaggcgcg aaagactgcc antngcggtg cntagtcgc 720  
 ctgact 726

<210> 506

<211> 762

<212> DNA

<213> Homo sapiens

<400> 506

```

ataaaaagaa tggctttgca ctgagcagct cagtctactg gtctcatcag tgaaaggctt   60
gtgaaaattt ctggaaagag cattggctgg cttgttcac tctctgtttg gtcagttgct  120
gtgtttctgc cggatcagat gagcagattg gttagtgaag gtcagtgtga gaagaagatt  180
gtttctgagc ttgagaagct tctggaggat tgaagagtat ttgaagtctg tgtcaaacat  240
ccacatcata agtgggaattt tggagatatt caaagaatgc tgcagaagg gtatctcagt  300
ggacttgagt actggaatga catccactgg agttgtgcct cttataatga gcaggtggct  360
ggggaaaagg aagaggagac aaattctgtt gctacccttt cctattcctc tgtggatgaa  420
acacaagtca gaagtctcta cgtgagctgc aaatcatctg gcaagtttat ctcttcagtg  480
cattcaagag agagccaaca tagcagaagt cagagagtca cagtgtgca gacaaacccc  540
aatcctgtgt ttgaaagccc aaacttggct gcagttgaaa tatgtanaga tgccagcaga  600
gagacctact tggttccatc ttcttgcaa agtatttgca agaactataa tgacttacag  660
attgcagggg gccaggtgat ggncattaat tcagtgcac cagattttcc tctgagagca  720
gttttgaata tggccctttg cttgaaanca ttctganaat cc                        762

```

<210> 507

<211> 786

<212> DNA

<213> Homo sapiens

<400> 507

```

acaacgctgc cgccgcgctc cgtgggcaac tcctactact gctgggctgg gctgggctgg   60
gctgggctgc gccggagctc gcctgcacag atcagctccg gagaggggag aaccacgctc  120

```

ctcggaccaa gcctcgggag ctaagccaga tctgccagtg agcctcaggc tttaggaact 180  
 gaagagtgtt tctgaaagat ctatccagca ctccgatggc cagcaacaac accgccagca 240  
 tagcacaagc caggaagctg gtagagcagc ttaagatgga agccaatatc gacaggataa 300  
 aggtgtccaa ggcagctgca gatttgatgg cctactgtga agcacatgcc aaggaagacc 360  
 ccttcctgac cctgttccg gcttcagaaa acccgtttag ggagaagaag tttttctgtg 420  
 ccataccttta agtcttttag aggggcctga agagcctccg ggctcctggg acattgatgt 480  
 agagttttta gtgaagtggg cacctttcta gtccacggca tttgaagaga gcgaggagaa 540  
 ccattctgga aactctaggc tatgcatgtt taaagatctg gtccccttta tgagaatgca 600  
 agccgatcca catcctgact taagagatct gattctgacg aactgctgga ggangggaaat 660  
 atataaaaaat aaaattgggtg tcacttcttt tctgctatcc ccaagccccc ccccccaaaa 720  
 tcctcatggt tctgcttnat attttgaaa ataaccatta aaacagacag ntgtactgag 780  
 gtaana 786

<210> 508

<211> 860

<212> DNA

<213> Homo sapiens

<400> 508

acaccatgcc gactgtcagc gtgaagcgtg atctgctctt ccaagccctg ggccgcacct 60  
 aactgacga agaatttgat gaactatgtt ttgaatttgg tctggagctt gatgaaattg 120  
 ctccgtagaa tttgngacag ccctggctga cctccgagca gaggctagct gtcccatctg 180  
 tctggactac ttgaaagacc cagtaccat cagctgtggg cataacttct gtctctctctg 240  
 catcattatg tcctggaagg atctagatga tagtttcccc tgcccctttt gccacttgtg 300  
 ctgtccagaa aggaaattta taagcaatcc ccagctgggt agtttgactg aaattgctaa 360  
 gcaactccag ctaagaagca agaggaagag gcaggaagag aagcatgtgt gtaagaagca 420  
 taatcagggt ttgactttct tctctcagaa agacctagag cttttatgtc caaggtgcag 480  
 tttgtccact gatcaccagc atcgtgngt ttggcccata aagaaggctg cctcctatca 540  
 cgaaaaaact ggagcaatac aatgcaccgt ggaaggagag agtggaacta attggaaaaa 600

gtcataacta taaaaccag aaaatcactg gaactgaaga aaaaggtaaa acatacggca 660  
gaagaagtca agtctgaatt ttgagcaact tagggatatt ctgcaaaatg agcangagac 720  
tggtttgggc aattacaaga tgacgagatg gatattttag cacaactaaa tgaaagccta 780  
ccaaantttt agatatactc tcattaaata tctactaaga gatagagagn tatatgtgaa 840  
gcagactgga atactggctg 860

<210> 509

<211> 678

<212> DNA

<213> Homo sapiens

<400> 509

tcgggctccg cgggcgggcg ggcggacatg gcggccaaca tgtaccgggt cggagattat 60  
gtctactttg agaattcctc cagcaacca tacctaataa gaaggataga agaactcaac 120  
aagactgcaa gtggcaacgt ggaagcaaaa gtagtatgct tttatagacg acgtgatatt 180  
tccaacacac ttataatgct cgcagataag catgctaaag aaattgagga agaattctgaa 240  
acaacagttg aggctgactt gaccgataag cagaaacatc agttgaaaca tagggaactc 300  
tttttgtcac gccagtatga atctctgccc gcaacacata tcaggggaaa gtgcagtgtt 360  
gcccttctga atgagacaga atcagtattg tcatatcttg ataaggagga taccttcttc 420  
tactcattgg tctatgacct ctcattgaaa aactattag ctgacaaagg tgaaatcaga 480  
gtgggaccta gatatacagc agacattcca gaaatgctgt tagaaggaga atcagatgag 540  
agggaacaat caaaattgga agttaaagt ttggatccaa atagcccact tacggatcga 600  
cagattgacc agtttttagt tgtagcacgt gctgntggga cattcgcaga nccctggatt 660  
gcagcagtct gtgangca 678

<210> 510

<211> 769

<212> DNA

<213> Homo sapiens

<400> 510

```

ttttttttt ttaacttgaa ttgatagttg gtttataatc ctggagttgt atatgttagg 60
gtttgctatt gagaagtata ggagtgtatt aactctgata aatgaagtgg gctaattagt 120
atttcagttt aattttctgc aattgcattt aagtttgtga tcagttcttt tctcctcact 180
gtataacttt ttcctgaaga ttgtataat tattagtggg aaaaactcca tcttagttgc 240
ttatgatttt aatgtcaatt tgaggaagat atcaccatat agaaaatact tagaagtagc 300
ttattttaaa aatattcatt tgcttttctt ccaaacacgt ggtcacttag caagcagtga 360
ttcaattatt catagtcctc agtatttatg taatgccaaa gaagtggaag aaggggaagt 420
gaagtgagaa aggaaattag gcagacaagt gaatcagagg gcaagagaaa tgagtaatgc 480
aaaaggggaa ggaaatgatg gtcagagcac acatgccttg cagcatgagc aaagaaaatg 540
tgctaaacaa aactacagtc agaatcatag aaaggataag gttttagaga ggttttgttg 600
ttttttaaac attcatgtga gctaaatata atgcaggtat tgaaatgatt actgcagata 660
tgccagatga ccttgatata tattttcatg ttaatcttct ggtatttggg ggtgntgaat 720
tggtaccccc acgttttacc tngntaagtg aattgaaata ttcaaggnc 769

```

<210> 511

<211> 802

<212> DNA

<213> Homo sapiens

<400> 511

```

taacaaatca tttcgtatta ggttccatta aaatgtcatt cctttgaaaa ggcaagggat 60
ttccactttc agaatttgaa aatgaaagta gcatgtttat ctaaaggcag aaaatagttc 120
ggacttggtt ttatgaaaat aagtaatggg ttctggagag gatttgttta gatttgcaca 180
gatggcgatg gcacctttta cttaaattaa cattaatcaa cagtgctaag gaaaatttac 240
acaaaattac aagataaaac atggaaatgt gtgcctttca gtatacaaac tcttgcttgg 300
tggccatttg ggtaatcaga ccatttgaat gcctgagagc atgtttaatt tctgtggagt 360
gccacatatg gctaaaacaa ctctttaatg tgcaattaat ttctagagta aaatgtctgt 420

```



tatgtgaggg ggatctttat gttgggcctt tctatTTTT aaatgttcac atttctttct 480  
 gttaattaaa tgccatcata atgtcacatt tacactgttg cctcttttaa aagcaaagcc 540  
 actttcttgt tctaagatta catcaagact tgagcagtgt gtagtaatta aaatgtgtgc 600  
 ttaatgagca taatagattc tggTTTTagg aaataacata tagcttttat atgaatattt 660  
 tcttttgcta taatgaaagt cacagatttt tttttcctg cttttatgga ggaatgaaaa 720  
 gagttggctc cctctaagag tatactattt ttgatctcat agcataatgn cnccttctta 780  
 tcnaagggaa atccccctgg at 802

<210> 512

<211> 782

<212> DNA

<213> Homo sapiens

<400> 512

tatgcacagg cacacaagaa ttgtgggcag atgagtgaga ttgaggccaa ggtccgctac 60  
 gtgaagctag cccgttctct caagacttac ggtgtctcct tcttcccggg gaaggtaggt 120  
 tatggaccct ttctactgcc ctcttgttt cccactcttg cccttttctg tctctgaaag 180  
 tctctggcct tgccctcagt cacatctccc accattccct aagattccca ttctcttctt 240  
 tgctctgacc tcatgaaaac ctgcctgtca tcagccctac accaccactt ccttccctac 300  
 cctgcatttt cccttgtccg ttagccctcc cggccacctc aacatccctt atggctgcaa 360  
 gctgatctga tcattcacct ctcatTTgac ctttgacctg taacaccaac accaacctct 420  
 gcctcatagg aaaaaatgaa agggaagaac aagctagtgc ccaggcttct gggcatcacc 480  
 aaggagtgtg tgatgcgagt ggatgagaag accaaggaag tgatccagga gtggaacctc 540  
 accaacaatca aacgctgggc tgcgtctccc aaaagcttca ccctggtaag tctggggact 600  
 ataacaagaa agtgcttttg gagtttcatt aaaggggcag ctgcagaggt ctcttcctc 660  
 tcttggggta agtatactga gtattactnc agaaaaaaag gaggntagag tagatggaga 720  
 atcttctctt ggggaaantg tgaaggcttt aaaatggaaa accggatgaa tggacttaat 780  
 tc 782